EXHIBIT D

A COMPARISON OF READERS' INTERPRETATIONS OF CHEST X-RAY EXAMINATIONS OF WORKERS ASSERTED TO BE EXPOSED TO ASBESTOS

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ATTACHMENT A

A COMPARISON OF READERS' INTERPRETATIONS OF CHEST X-RAY EXAMINATIONS OF WORKERS ASSERTED TO BE EXPOSED TO ASBESTOS

INTRODUCTION

This report describes two phases of a project to determine the validity of interpretations of chest radiographs of selected "samples" of individuals alleged to have lung changes resulting from occupational exposure to asbestos.

The first phase of this project was a description and analysis of an independent review by six consultant readers of five groups of chest X-ray examinations previously interpreted as indicating significant lung changes. The 319 individuals in the five groups were examined by an internist and radiologist between January 1993 and May 1996. For the purposes of this study the groups were designated as H, K, L, M and N. The initial readers concluded that almost all of the 319 selected individuals had significant lung changes. The six consultant readers in this review indicated only 15.7 percent of their readings as showing parenchymal abnormalities consistent with pneumoconiosis (asbestosis), and 10.0 percent with pleural abnormalities as defined by the International Labor Office (ILO). The consultant readers recorded all of their interpretations on the standard reporting form provided by the National Institute for Occupational Safety and Health (NIOSH) shown as Exhibit 1, page 14. The initial readers interpretations generally were recorded on conventional medical records with occasional use of the NIOSH form.

The second phase of the project involved a similar description and analysis of the data available for 891 workers in the groups designated as Q, R, S, T, U and W. It should be noted that the data used to compare the radiographic interpretations by the six consultant readers with the initial interpretations for the Q-W groups were based on the 269 individuals in groups Q and R. This was decided after determining that the individuals, and their films and radiographic reports in the Q and R groups were representative of the

total number of 891 workers in groups Q through W. Comparisons of radiographic interpretations in this report are limited to chest X-ray examination of individuals in the H-N and Q-R groups.

As seen in Text Table A, for both the H-N and Q-R groups, the six consultant readers reported significantly fewer parenchymal and pleural abnormalities than did the internists and radiologists who provided the initial medical records. Text Table A also shows significantly lower percentages for both parenchymal and pleural abnormalities for groups Q-R in comparison with groups H-N.

Text Table A. Parenchymal and Pleural Abnormalities Consistent with Pneumoconiosis (Asbestosis) Reported by Initial and Consultant Readers

	Groups H – N		Groups Q - R	
	Initial Readers	Consultant Readers	Initial Readers	Consultant Readers
Parenchymal	97.4%	15.7%	85.8%	6.4%
Pleural	54.6%	10.0%	98.9%	5.5%

These general findings are supplemented by the tables and discussion that follow in this report.

Data Related to Groups H-N and Comparisons with Q-W

This analysis is based upon medical records, i.e., internists' records and radiologists' films and reports, provided by legal representatives of workers for whom claims related to pulmonary asbestosis had been submitted for adjudication, and independent interpretations of the chest X-ray films by six consultants. The 319 chest X-ray examinations in the H-N groups interpreted by the six consultants were provided by several different attorneys representing some of the workers. In some instances, attorneys volunteered access to the X-ray films, and in others, access was gained by court order. Within the different number of cases held by each attorney, a method was used to select a sample of no less than 25 cases from each client list. This resulted in the receipt of five groups of X-ray examinations for interpretation by the six consultants. The method chosen was a reasonable one under the circumstances, and provided a sample of the attorneys' clients, but may not represent important characteristics of the universe of 50,000 workers, such as age, length and intensity of occupational exposure, type of employment and other related variables.

The 891 medical records and the chest X-rays in the Q-W groups were provided by one attorney. The records and films were randomly assigned to six sub-sets for interpretation by the six consultant readers. The random assignment of the records and films was facilitated by the fact that the last four digits of the workers' Social Security Numbers were sequentially assigned by each regional office. This resulted in a representative sample of 289 individuals in groups Q-R for whom 269 chest X-ray films were available and interpreted by each of the consultant readers.

For the Q-R groups each consultant reader again used the form adopted by NIOSH shown as Exhibit I, page 14 to record the roentgenographic interpretation of each chest X-ray examination. This was done in accordance with the 1980 ILO guidelines for

classifying radiographs of the pneumoconioses. A summary of the key findings from this process is shown for both groups H-N and Q-R in the flow charts (Exhibits II and III, pages 15 and 16).

It should be noted that after eliminating films of unacceptable quality, 5.0 percent of H-N and 4.4 percent of Q-R reports, the consultant readers recorded that 39.6 percent of H-N and 63.2 percent of Q-R films were "completely negative". None of these X-ray examinations was designated as "unacceptable quality" or "completely negative" in the initial records provided by the internist and radiologist. The percentages for parenchymal and pleural abnormalities noted earlier are also seen on the flow charts with "Other Abnormalities" recorded by the six consultants. For groups H-N, 42.8 percent of the reports noted an "other abnormality" compared with 26.2 percent for groups Q-R.

Demographic differences are particularly important when reviewing the rates of parenchymal and pleural abnormalities noted by the consultant readers shown in Text Tables B through D. Here, rates by age, race and gender are shown for comparing the results in both groups.

Text Table B. Age Specific Parenchymal and Pleural Abnormality Rates per 100 Workers Based upon Consultant Readings

	Groups H-N		Groups Q-R	
Age Groups	Parenchymal	Pleural	Parenchymal	Pleural
Under 39	5.9	7.8	4.9	2.1
40-44	10.9	2.6	6.1	5.2
45-49	13.2	7.4	5.1	2.2
50-54	18.2	13.5	9.2	7.0
55-59	11.7	4.2	8.7	8.7
60-64	11.7	14.2	5.8	19.2
65+	22.5	16.3	6.7	3.3
Not Reported	15.2	5.4	7.4	NA
Total	15.7	10.0	6.4	5.5

The age specific rates per 100 workers shown in Text Table B. indicate that the highest parenchymal value in the H-N groups was 22.5 in the age group 65 and over, and 9.2 for the workers 50-54 years of age in the Q-R groups. For pleural abnormalities the highest rate per 100 workers in the H-N groups, 16.3, was also noted in ages 65 and over, and 19.2 was the highest for ages 60-64 in the Q-R groups.

Text Table C. Parenchymal and Pleural Abnormality Rates per 100 Workers by Race Based upon Consultant Readings

	Groups H-N		Groups Q-R	
Race	Parenchymal	Pleural	Parenchymal	Pleural
All	15.7	10.0	6.4	5.5
Black	10.1	9.9	7.3	4.4
Caucasian	21.0	10.6	5.1	6.7
Not Reported	13.8	8.1	2.8	13.9

The 21.0 per 100 parenchymal abnormality rate for Caucasians in the H-N groups was significantly higher than the rate of 5.1 per 100 shown for the Q-R groups. The parenchymal abnormality rate of 10.1 per 100 for Blacks was also significantly higher in the H-N groups than the 7.3 per 100 in Q-R. As noted earlier the overall pleural abnormality rate of 10.0 per 100 recorded for the H-N groups was significantly higher that the 5.5 per 100 noted in the Q-R groups. This difference is true for both races, and it should be noted that the parenchymal abnormality rate of 21.0 per 100 for Caucasians in the H-N groups is twice that of the pleural abnormalities rate in those groups.

Text Table D. Parenchymal and Pleural Abnormality Rates per 100 Workers by Gender Based upon Consultant Readings

	Groups H-N		Groups O-R	
Gender	Parenchymal	Pleural	Parenchymal	Pleural
All	15.7	10.0	6.4	5.5
Male	16.0	11.2	6.9	6.7
Female	11.3	2.0	4.0	0.3
Not Reported	15.6	10.5	6.4	5.5

Text Table D shows that the parenchymal and pleural rates per 100 workers for males was higher than that for females in both the H-N and Q-R groups. Also of note is that both abnormalities had higher rates for each gender in the H-N groups when compared with the Q-R groups.

Classification Systems and Inter-observer Variability

Beginning in the 1930's, the International Labor Office (ILO) and predecessor organizations sponsored a series of chest X-ray classification systems intended to allow epidemiological comparison of patterns of disease among workers occupationally exposed to mineral dusts. In the United States, this system has been used as an objective basis for determining the eligibility of coal miners and others for national and state decreed compensation programs, beginning with those for coal miners specified in PL 91-173, as amended.

A "B" reader system was created by the National Institute for Occupational Safety and Health (NIOSH) in 1975 as a method for recognizing a cadre of radiologists and other

physicians who demonstrated their knowledge of the ILO classification system. Qualification is by examination, with requalification, also by examination, required at three-year intervals. At present, some 700 U.S. physicians are qualified as B readers. The system has been criticized for failing to achieve a consistency of reading among several hundred "qualified" physicians. However, it has been accepted widely in the U.S. and elsewhere as the only qualifying option open to physicians apart from government employed readers.

The issue of inter-observer variability has concerned physicians since the chest X-ray became a staple of medical practice at the beginning of this century. Clinical observations and a series of organized studies in various countries have demonstrated ranges of variability among radiologists and other physicians. Other studies have tested the levels of positive classifications of chest radiographs of various groups of dust-exposed workers in mining, foundry work, shipbuilding, construction, salvage and other heavy industry. Besides the scientific literature, these subjects have been featured in the programs of the 7th and 9th International Conferences on Occupational Respiratory Diseases, in Pittsburgh, Pennsylvania in 1989 and in Kyoto, Japan in 1997.

We have cited 30 studies in the Bibliography that follows, tracing the history of the ILO, noting the concerns of investigators about inter-observer variability and reporting on studies of various occupationally exposed populations. In contrast to the initial readers of the X-ray films included in this report, none of the cited reports have produced findings of lung-field changes in a majority or preponderance of workers. In effect, there is no study in the world literature which supports positive findings of 90 percent or higher in any worker population. Indeed, there is no published study which supports positive findings of asbestosis in as many as half of the exposed populations.

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SUMMARY OF FINDINGS

Data Selected and Codes used for Items in this Report

Data for the six consultant readers shown in this report was captured from completed NIOSH Forms. The entries were recorded in accordance with " **Guidelines for the use of ILO International Classification of Radiographs of Pneumoconiosis" Revised Edition 1980, International Labor Office, Geneva** *Occupational Safety and Health Series No. 22 (Rev.)* In some cases initial readers also provided data on NIOSH Forms, but in most instances the data were reported on conventional medical records and radiologists' reports.

Selected Data Elements

- **Examination Identification** - Assigned code
- **Workers Social Security Number**
- **Date of Birth** – MM/DD/YYYY
- **Internist Examination Date** – MM/DD/YYYY
- **Gender**
  - Male
  - Female
- **Race**
  - Black
  - Caucasian
  - Indian
- **Date of X-ray** - MM/DD/YYYY
- **Film Quality**
  - = good
  - = acceptable
  - = poor
  - = unacceptable

- **Film Completely Negative**
  - Y = Yes
  - N = No
- **Parenchymal Abnormalities**
  - Y = Yes
  - N = No
- **Small Opacities - Profusion.** Profusion was entered as it was recorded on the form, from 0/-, 0/0, 0/1—through 3/2, 3/3, and 3/4.
- **Pleural Abnormalities**
  - Y = Yes
  - N = No
- **Other Abnormalities**
  - Y = Yes
  - N = No
- **Other Symbols** - All other symbols were coded as indicated on the form.
- **Other Comments** – If any legible comments were present they were recorded verbatim.
- **Internist Impression** – Verbatim
- **Radiologist Impression** – Verbatim

Exhibit I

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE

OMB No. 0920-0555
Expires 6/94

CENTERS FOR DISEASE CONTROL
National Institute for Occupational Safety and Health
Federal Mine Safety and Health Act of 1977
Medical Examination Program

ROENTGENOGRAPHIC INTERPRETATION

NOTE: Please record your interpretation of a single film by placing an "X" in the appropriate boxes on this form and return it promptly to:

Receiving Center
Appalachian Laboratory for Occupational Safety and Health
Box 4330
Morgantown, West Virginia 26505

WORKER'S Social Security Number

TYPE OF READING: A B P

FACILITY IDENTIFICATION

1A. DATE OF X-RAY (MONTH / DAY / YR)

1B. FILM QUALITY 1 2 3 V

1C. IS FILM COMPLETELY NEGATIVE? YES ☐ (Proceed to Section 3) NO ☐ (Proceed to Section 2)

2A. ANY PARENCHYMAL ABNORMALITIES CONSISTENT WITH PNEUMOCONIOSIS? YES ☐ COMPLETE 2B and 2C NO ☐ PROCEED TO SECTION 3

2B. SMALL OPACITIES

a. SHAPE/SIZE — PRIMARY: p q r; SECONDARY: s t u

b. ZONES: R L

c. PROFUSION: 0/- 0/0 0/1 1/0 1/1 1/2 2/1 2/2 2/3 3/2 3/3 3/+

2C. LARGE OPACITIES

SIZE: A B C

PROCEED TO SECTION 3

3A. ANY PLEURAL ABNORMALITIES CONSISTENT WITH PNEUMOCONIOSIS? YES ☐ COMPLETE 3B, 3C and 3D NO ☐ PROCEED TO SECTION 4

3B. PLEURAL THICKENING

a. DIAPHRAGM (plaque) — SITE: O R L

b. COSTOPHRENIC ANGLE — SITE: O R L

3C. PLEURAL THICKENING . . . Chest Wall

a. CIRCUMSCRIBED (plaque)

	R	L
SITE	O R	O L
IN PROFILE — I. WIDTH	O A B C	O A B C
II. EXTENT	0 1 2 3	0 1 2 3
FACE ON — III. EXTENT	0 1 2 3	0 1 2 3

b. DIFFUSE

	R	L
SITE	O R	O L
IN PROFILE — I. WIDTH	O A B C	O A B C
II. EXTENT	0 1 2 3	0 1 2 3
FACE ON — III. EXTENT	0 1 2 3	0 1 2 3

3D. PLEURAL CALCIFICATION

	SITE	EXTENT
a. DIAPHRAGM	O R	0 1 2 3
b. WALL		0 1 2 3
c. OTHER SITES		0 1 2 3

	SITE	EXTENT
a. DIAPHRAGM	O L	0 1 2 3
b. WALL		0 1 2 3
c. OTHER SITES		0 1 2 3

PROCEED TO SECTION 4

4A. ANY OTHER ABNORMALITIES? YES ☐ COMPLETE 4B and 4C NO ☐ PROCEED TO SECTION 5

4B. OTHER SYMBOLS (OBLIGATORY)

0 as bu ca cn co cp cv di ef em rs hr hy ho id ih kl pi pn ep tb

Report items which may be of present clinical significance in this section.

OD (SPECIFY eld.) _____

Date Personal Physician notified? (MONTH / DAY / YR)

4C. OTHER COMMENTS _____

SHOULD WORKER SEE PERSONAL PHYSICIAN BECAUSE OF COMMENTS IN SECTION 4C? YES NO

PROCEED TO SECTION 5

5. FILM READER'S INITIALS

PHYSICIAN'S SOCIAL SECURITY NUMBER*

DATE OF READING (MONTH / DAY / YR)

NAME (LAST—FIRST—MIDDLE)

Complete if social security number is not furnished:

STREET ADDRESS | CITY | STATE | ZIP CODE

*Furnishing your social security number is voluntary. Your refusal to provide this number will not affect your right to participate in this program.

CDC/NIOSH (M) 2.8
REV. 4/88

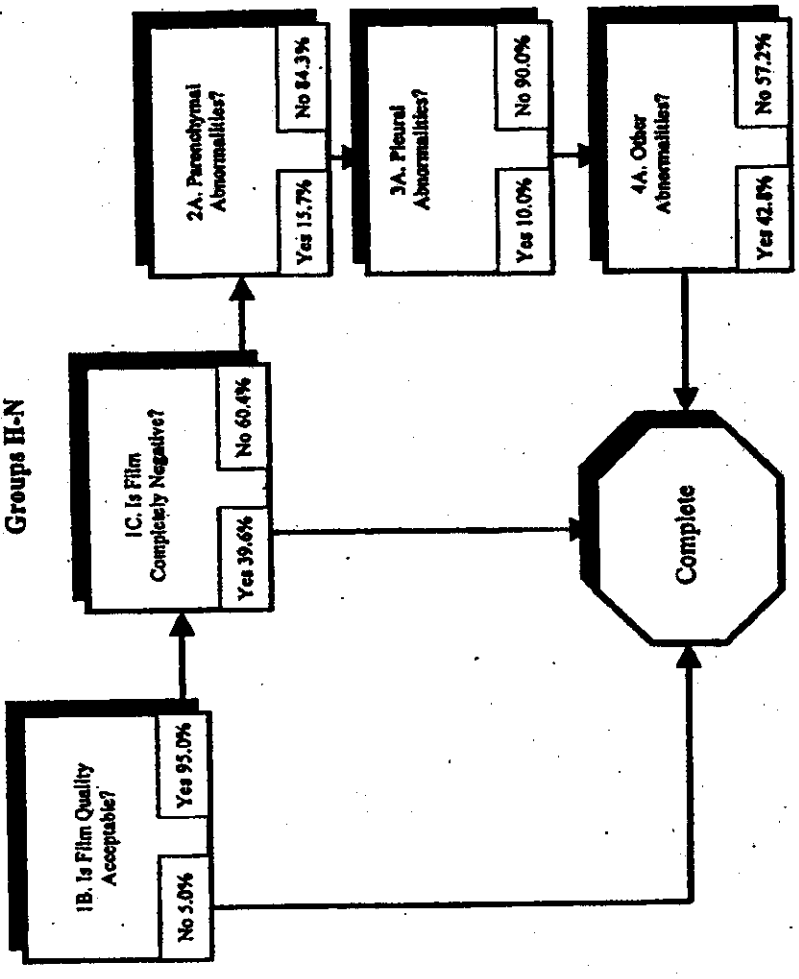
Exhibit II

Summary of Consultant Readings of Chest X-ray Examinations of Workers Asserted to be Exposed to Asbestos

Based on 1914 Reports

Flow Chart and Selected Items Recorded in NIOSH Format*

Groups H-N



* Based on "Guidelines for the use of ILO International Classification of Radiographs of Pneumoconioses" Revised Edition 1980

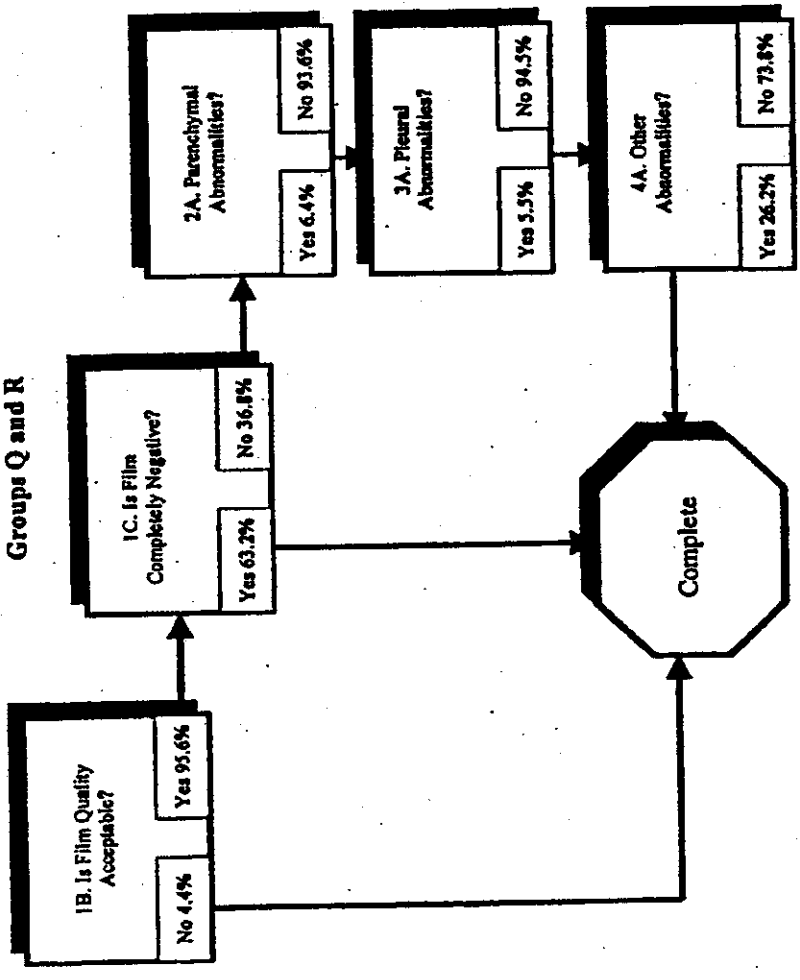
Exhibit III

Summary of Consultant Readings of Chest X-ray Examinations of Workers Asserted to be Exposed to Asbestos

Based on 1612 Reports

Flow Chart and Selected Items Recorded in NIOSH Format*

Groups Q and R



* Based on "Guidelines for the use of ILO International Classification of Radiographs of Pneumoconioses" Revised Edition 1980

Discussion of Tables

The reader should be aware of the fact that the sequence of the consultant readers film interpretations and subsequent analysis of groups H through N and groups Q through W, were not in the same chronological order as the dates of the examinations performed by the internist and initial radiologist. Chest X-ray films and related records designated as groups H through N in this report were received between September 1997 and February 1998. Those designated as groups Q through W were received in August 1998.

As indicated in Attachment A. Tables 1 and 2, the dates of X-ray examinations reported by the initial readers for the films in groups H through N were primarily (95%) from January 1993 through May 1996. The dates of X-ray examinations reported for the Q-W group were from October 1990 through May 1992. The higher rates of abnormalities noted by the consultant readers in the H through N groups compared to those in the Q through R groups may be related to this chronology.

With regard to dates, it should be noted that when initial examinations were reported by the internist and radiologist were reviewed by day of week, Table 3, a relatively even distribution is seen for groups H through N, i.e., examinations performed in the 1993 through 1996 period. However, in groups Q through W over 96 percent of the examinations in the 1990 through 1992 period were performed on Friday and Saturday.

Table 4 shows a comparison of film quality ratings by consultant readers for the chest films they interpreted in groups H-N and Q-R. The percent distributions are quite similar with over 77 percent rated "good" or "acceptable" in the two groups. The "unacceptable" ratings were 5.0 percent in the H-N groups and 4.4 percent in the Q-R groups. The cases with unacceptable ratings are especially important in this study because no interpretations of such films were possible.

Table 5 show the comparison of responses to the question, "Is Film Completely Negative?" by consultant readers for groups H-N and Q-R. This indicates significant differences in the H-N groups where 39.6 percent of the consultant readings were "yes" compared to 63.2 percent in the Q-R groups. This difference greatly reduced the number of NIOSH forms completed by the consultant readers in the Q-R groups since only 516 of the films were interpreted as indicating some abnormality. In the H-N group over twice the number, i.e., 1057 reports were interpreted as having an abnormality.

Table 6 shows the comparison of small opacity profusion recorded by the consultant readers for parenchymal abnormalities noted in groups H-N and Q-R. While the numbers are relatively small for specific profusion ratings, a comparison of the categories, i.e., 1, 2 and 3 indicates similar percent distributions. The "zero" category was noted in 19.5 percent of the H-N parenchymal interpretations compared to 12.3 percent in Q-R. Category "one" had totals of 70.3 percent in H-N compared to 79.2 percent in Q-R. Categories "two" and "three" show totals of 10.2 percent versus 8.5 percent respectively.

Table 7 shows the number and percent of "Other Abnormalities," i.e., those not related to the pneumoconioses, reported by consultant readers for groups H-N and Q-R. There were 820 or 42.8 percent of the interpretations in the H-N groups with other abnormalities, which is almost twice the 422 readings or 26.2 percent of the interpretations noted in the Q-R groups. These differences are similar to those observed for the abnormalities related to the pneumoconioses in comparing the results of the two study groups.

Table 8 summarizes the frequency of other abnormalities reported as symbols by the consultant readers on the NIOSH Form. For both study groups the most frequently used symbols were the same, namely, (em) – definite emphysema, (co) – abnormality of cardiac size or shape, (fr) – fractured ribs and (O) – other abnormalities for which symbols are not

available on the NIOSH form. Together these four accounted for 83.5 percent of the symbols in the H-N groups and 91.7 percent of those in the Q-R groups.

Tables 9a. and 9b. shows several comparisons of parenchymal abnormalities reported by consultant and initial readers for the two study groups. As noted earlier, the consultants interpreted 15.7 percent of their readings as parenchymal abnormalities in the H-N groups, compared to 6.4 percent in the Q-R groups. The initial readers reported 97.4 percent and 85.8 percent as parenchymal abnormalities in the two groups. The differences between consultant and initial readers are statistically significant, as are the consultant readers' findings of parenchymal abnormalities between the two study groups.

Tables 10a. and 10b. shows the number and percentages of pleural abnormalities noted by consultant and initial readers in each of the two study groups. The 10.0 percent of readings noted by consultants as pleural abnormalities for the H-N groups, is significantly higher than the 5.5 percent shown for the Q-R groups. For the initial readers a higher rate namely, 98.9 percent, is shown for the Q-R groups when compared with the 54.6 percent for pleural abnormalities in H-N groups.

Tables 11a., b., c. and d. As noted earlier, most of the data related to the chest X-ray examinations recorded by the initial readers were in the format of conventional medical records and radiological reports. These included an "impression" summarizing the radiographic interpretation. Verbatim listings of these impressions from groups H-K and Q-R are shown in Tables 11a. and b. for the radiologists reports, and in 11c. and d. for the internists' records. As noted in almost every case in each of the study groups, a positive impression of "pulmonary asbestosis" was noted by the internist and initial radiologist reader on the documents. The most frequently used impression in the initial radiologists' report was "Findings compatible with pulmonary asbestosis." The internists' records most frequently indicated "Pulmonary asbestosis" as the summary impression.

Summary Statement

This review of the data provided by six consultant readers of chest X-ray films that were initially interpreted as positive for "pulmonary asbestosis" by internists and radiologists, clearly shows large differences in the number and percent of such abnormalities. The differences between the percentages of parenchymal abnormalities reported by the initial readers namely 97.4 for groups H-N, and 85.8 for groups Q-R, and those noted by the consultants, i.e., 15.7 percent and 6.4 percent are highly significant. The probability of such differences being due to chance alone exceeds 3 in 10 million. Throughout this report these differences between the consultants and the initial readers were observed for many variables such as demographic characteristics, dates of examinations and other abnormalities.

The high rates of abnormalities reported by the initial readers also conflict with studies reported in the literature where the fraction of positive cases within the many groups studied has consistently been less than half of the selected populations.

After carefully reviewing the source documents, the items selected for data processing and analysis, and the resultant findings for the two study groups, there appears to be no clinical or scientific support for the large number and high percentage of asbestosis cases reported by the initial readers. The differences cannot be explained by inter-observer variability on the part of the several readers, nor does it appear that the characteristics of the individuals in the two groups who had the chest X-ray examinations were different from those described in the open literature.

While I am not familiar with the training and expertise of the internists and radiologists who performed the initial examination of the workers, I assume they were qualified licensed physicians who understood the ILO guidelines and NIOSH format for recording interpretations related to the pneumoconioses. Therefore, the observed differences are probably not due to incompetence or ignorance. In my opinion, it is likely that the findings associated with the initial readers' interpretations of the chest X-ray films in these studies are the result of an intent to deceive or to commit fraud.

Attachment A

Tables 1 through 12

Table 1

Distribution of Examinations Reported by Initial Radiologists by Month and Year Groups H - N 319 Reports

Month	Year	H	K	L	M	N	Total	Percent
May	1991			1			1	0.3
June	1991			2			2	0.6
Aug	1991		2	1			3	0.9
Sept	1991			1			1	0.3
Dec	1991			1			1	0.3
Subtotal			2	6			8	2.5
Feb	1992			1			1	0.3
Mar	1992			1			1	0.3
Apr	1992		1				1	0.3
May	1992		1				1	0.3
Sept	1992	1		1			2	0.6
Subtotal		1	2	3			6	1.9
Jan	1993			1			1	0.3
Feb	1993		1	2			3	0.9
Mar	1993	5					5	1.6
Apr	1993	1	1	1		2	5	1.6
May	1993		1	1		1	3	0.9
June	1993			1			1	0.3
July	1993	4		3			7	2.2
Aug	1993			1			1	0.3
Sept	1993			2		1	3	0.9
Oct	1993			2			2	0.6
Nov	1993		1	1		1	3	0.9
Dec	1993		1	3		2	6	1.9
Subtotal		10	5	18		7	40	12.5
Jan	1994		2	2		2	6	1.9
Feb	1994		2	1			3	0.9
Mar	1994	15		2			17	5.3
Apr	1994			3		16	19	6.0
May	1994	7					7	2.2
June	1994	7	1			10	18	5.6
July	1994	5	2			5	12	3.8
Aug	1994	5	2			1	8	2.5
Sept	1994	5	4		15	1	25	7.8
Oct	1994	1	5		8		14	4.4
Nov	1994	1	7		2		10	3.1
Dec	1994		1	1	8		10	3.1
Subtotal		46	26	9	33	35	149	46.7

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Table 1

Distribution of Examinations Reported by Initial Radiologists by Month and Year Groups H - N 319 Reports

(Continued)

Month	Year	H	K	L	M	N	Total	Percent
Jan	1995		4		12		16	5.0
Feb	1995		1			1	2	0.6
Mar	1995		5	1	5		11	3.4
Apr	1995		3				3	0.9
May	1995		4				4	1.3
June	1995		8				8	2.5
July	1995		6				6	1.9
Aug	1995	7	9				16	5.0
Sept	1995	1	5				6	1.9
Oct	1995		3				3	0.9
Nov	1995	1					1	0.3
Dec	1995	2	3				5	1.6
Subtotal		11	51	1	17	1	81	25.4
Jan	1996	1	2				3	0.9
Feb	1996	2	2				4	1.3
Mar	1996	3	3				6	1.9
Apr	1996	3	4				7	2.2
May	1996	2	2				4	1.3
Subtotal		10	11				21	6.6
NR	NR	6	3			5	14	4.4
Total		84	00	37	50	48	319	100.0

Table 2

Distribution of Examinations Reported by Initial Radiologists by Month and Year Groups Q - W 891 Reports

Month	Year	Q	R	S	T	U	W	Total	Percent
Oct	1990	8	5	4	5	2	1	25	2.8
Nov	1990	15	15	16	16	17	14	93	10.4
Dec	1990	21	20	25	16	20	16	118	13.2
Subtotal		44	40	45	37	39	31	236	26.5
Jan	1991	19	13	20	12	20	16	100	11.2
Feb	1991	20	9	18	19	22	17	105	11.8
Mar	1991	14	9	10	15	9	15	72	8.1
Apr	1991	10	2	7	7	9	11	46	5.2
May	1991	1	0	0	1	2	1	5	0.6
June	1991	4	5	4	5	2	5	25	2.8
July	1991	2	2	2	5	4	0	15	1.7
Aug	1991	7	20	11	11	8	10	67	7.5
Sept	1991	5	3	8	1	3	5	25	2.8
Oct	1991	2	2	5	3	1	4	17	1.9
Nov	1991	4	2	2	3	6	3	20	2.2
Dec	1991	5	4	5	1	4	8	27	3.0
Jan	1992	0	2	1	2	4	2	11	1.2
Feb	1992	4	7	2	5	3	1	22	2.5
Mar	1992	1	1	2	1	4	1	10	1.1
Apr	1992	3	3	4	10	5	5	30	3.4
May	1992	5	7	4	7	7	6	36	4.0
Subtotal		13	20	13	25	23	15	109	12.2
NR	NR	4	4	6	3	3	2	22	2.5
Total		154	135	156	148	155	143	891	100

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Table 3

Distribution of Examinations by Day of Week Reported by Initial Readers

Groups H - N

Radiologist

Day of Week	Number	Percent
Sunday	1	.3
Monday	42	13.2
Tuesday	42	13.2
Wednesday	38	11.9
Thursday	53	16.6
Friday	68	21.3
Saturday	65	20.4
Not Reported	10	3.1
Total	319	100.0

Internist

Day of Week	Number	Percent
Sunday	1	.3
Monday	34	10.7
Tuesday	39	12.2
Wednesday	42	13.2
Thursday	41	12.9
Friday	71	22.3
Saturday	50	15.7
Not Reported	41	12.9
Total	319	100.0

Groups Q - W

Radiologist

Day of Week	Number	Percent
Sunday	1	0.1
Monday	1	0.1
Tuesday	0	0.0
Wednesday	0	0.0
Thursday	1	0.1
Friday	132	14.8
Saturday	727	81.6
Not Reported	29	3.3
Total	891	100.0

Internist

Day of Week	Number	Percent
Sunday	0	0.1
Monday	0	0.0
Tuesday	0	0.0
Wednesday	14	1.5
Thursday	0	0.0
Friday	124	13.9
Saturday	742	84.5
Not Reported	11	0.0
Total	891	100.0

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Table 4

Comparative Ratings of Film Quality* Reported by Consultant Readers

Groups H - N

Good	513	26.8
Acceptable	973	50.8
Poor	298	15.6
Unacceptable	96	5.0
Not Reported	34	1.8
Total	1914	100.0

Groups Q - R

Good	462	28.7
Acceptable	885	54.9
Poor	191	11.8
Unacceptable	71	4.4
Not Reported	3	0.2
Total	1612	100.0

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*NIOSH Form Item 1B.

Comparison of Responses to "Is Film Completely Negative?"* Reported by Consultant Readers

Groups H - N

[illegible]	[illegible]	[illegible]
Yes	757	39.6
No	1057	55.2
Blank	100	5.2
Total	1914	100.0

Groups Q - R

[illegible]	[illegible]	[illegible]
Yes	1019	63.2
No	516	32.0
Blank	77	4.8
Total	1612	100.0

*NIOSH Form Item 1C.

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Comparative Ratings of Small Opacities, Profusion* Reported by Consultant Readers

Groups H - N

Profusion	Number	Percent
0/1	61	19.5
1/0	106	33.9
1/1	94	30.0
1/2	20	6.4
2/1	12	3.8
2/2	13	4.2
2/3	5	1.6
3/2	1	.3
3/3	1	.3
Total	313	100.0

Groups Q - R

Profusion	Number	Percent
0/1	13	12.3
1/0	46	43.4
1/1	30	28.3
1/2	8	7.5
2/1	5	4.7
2/2	2	1.9
2/3	2	1.9
3/2	0	0.0
3/3	0	0.0
Total	106	100.0

*NIOSH Form Item 2B.c.

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Table 7

Comparison of Other Abnormalities* Reported by Consultant Readers

Groups H - N

Other Abnorm.	Number	Percent
Yes	820	42.8
No	232	12.1
Blank	862	45.0
Total	1914	100.0

Groups Q - R

Other Abnorm.	Number	Percent
Yes	422	26.2
No	91	5.6
Blank	1099	68.2
Total	1612	100.0

*NIOSH Form Item 4A.

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Comparison of Consultant Readers' Interpretations of Other Abnormalities Reported as Symbols*

Other Abnormalities and Symbols	Groups H - N		Groups Q - R	
	Count	Percent	Count	Percent
Coalescense of small pneumoconiotic opacities (ax)	2	0.2	0	0.0
Bulla(e) (bu)	30	3.0	14	2.7
Cancer of lung or plesura (ca)	22	2.2	3	0.6
Calcification is small pneumoconiotic opacities (cn)	0	0.0	0	0.0
Abnormality of cardiac size or shape (co)	109	10.7	68	13.1
Cor pulmonale (cp)	1	0.1	0	0.0
Cavity (cv)	0	0.0	0	0.0
Marked distortion of the intrathoracic organs (di)	4	0.4	2	0.4
Effusion (ef)	6	0.6	2	0.4
Definite emphysema (em)	168	16.5	79	15.2
Eggshell calcification of hilar or mediastinal lymph nodes (es)	0	0.0	0	0.0
Fractured rib(s) (fr)	66	6.5	18	3.5
Enlargement of hilar or mediastinal lymph nodes (hl)	18	1.8	13	2.5
Honeycomb lung (ho)	5	0.5	0	0.0
Ill defined diaphragm (id)	14	1.4	0	0.0
Ill defined heart outline (ih)	11	1.1	0	0.0
Septal (Kerley) lines (interstitial edema) (kl)	5	0.5	3	0.6
Pleural thickening in the interlobar fissure or mediastinum (pi)	36	3.5	6	1.2
[illegible]ax (px)	1	0.1	0	0.0
Rheumatoid pneumoconiosis (rp)	0	0.0	0	0.0
Tuberculosis (active) (tb)	12	1.2	1	0.2
Other (O)	506	49.8	312	59.9
Total Abnormalities Reported	1018	100.0	521	100.0

*NIOSH Form Item 4B.

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Table 9a.

Comparison of Parenchymal Abnormalities* Reported by Consultant Readers

Groups H - N

Parenchymal Abnorm.	Number	Percent
Yes	300	15.7
No	794	41.5
Blank	820	42.8
Total	1914	100.0

Groups Q - R

Parenchymal Abnorm.	Number	Percent
Yes	103	6.4
No	408	25.3
Blank	1101	68.3
Total	1612	100.0

*NIOSH Form Item 2A.

Table 9b.

Comparison of Parenchymal Abnormalities** Indicated by Initial Readers

Groups H - N

Parenchymal Abnorm.	Number	Percent
Yes	304	97.4
No	0	0.0
Blank	8	2.6
Total	312	100.0

Groups Q - R

Parenchymal Abnorm.	Number	Percent
Yes	230	85.8
No	39	14.2
Blank	0	0.0
Total	269	100.0

**Limited use of NIOSH Form Item 2A. Primarily inferred from Internist's and Radiologist's Reports.

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Table 10a.

Comparison of Pleural Abnormalities* Reported by Consultant Readers

Groups H - N

Pleural Abnorm.	Number	Percent
Yes	191	10.0
No	869	45.4
Blank	854	44.6
Total	1914	100.0

Groups Q - R

Pleural Abnorm.	Number	Percent
Yes	88	5.5
No	429	26.6
Blank	1095	67.9
Total	1612	100.0

*NIOSH Form Item 3A

Table 10b.

Comparison of Pleural Abnormalities** Indicated by Initial Readers

Groups H - N

Pleural Abnorm.	Number	Percent
Yes	171	54.6
No	140	44.7
Blank	2	.6
Total	313	100.0

Groups Q - R

Pleural Abnorm.	Number	Percent
Yes	265	98.9
No	3	1.1
Blank	0	0.0
Total	268	100.0

**Limited use of NIOSH Form Item 2A. Primarily inferred from Internist's and Radiologist's Reports.

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Table 11a. Initial Radiologists' Impressions for Groups H and K

Exam ID	[redacted]
001H2	Pulmonary asbestosis
001K2	Consistent with asbestosis
002H2	Findings compatible with pulmonary asbestosis
002K2	Consistent with asbestosis
003H2	Findings compatible with pulmonary asbestosis, obstructive lung disease
003K3	Consistent with asbestosis
004H2	NR
004K2	Consistent with asbestosis
005H2	Findings compatible with pulmonary asbestosis, possible cardiomegaly
005K2	Findings compatible with pulmonary asbestosis
006H2	NR
006K2	Consistent with asbestosis
007H2	NR
007K2	Consistent with asbestosis
008H2	NR
008K2	Consistent with asbestosis
009H2	Findings compatible with pulmonary asbestosis
009K2	Consistent with asbestosis and asbestos related disease
010H3	NR
010K2	Asbestosis
011H2	NR
011K2	Consistent with asbestosis
012H2	Obstructive lung disease, findings compatible with pulmonary asbestosis
012K2	Consistent with asbestosis, enlarged heart, see the doctor
013H2	Findings compatible with pulmonary asbestosis
013K2	Consistent with asbestosis
014H2	Findings compatible with pulmonary asbestosis
014K2	Consistent with asbestosis
015H3	NR
015K2	Consistent with asbestosis
016H2	NR
016K2	Consistent with asbestosis
017H2	Findings compatible with pulmonary asbestosis

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Exam ID	[redacted]
017K2	Consistent with asbestosis
018H2	NR
018K2	Consistent with asbestosis
019H2	NR
019K2	Consistent with asbestosis
020H4	Consistent with asbestosis
020K2	Consistent with asbestosis, enlarged heart, see the doctor
021H2	Consistent with asbestosis and asbestosis related disease
021K2	Consistent with asbestosis and asbestos related disease, rule out, etc
022H4	Consistent with asbestosis
022K2	Consistent with asbestosis and asbestos related disease, rule out, etc
023H4	Consistent with asbestosis
023K2	Consistent with asbestosis
024H2	Consistent with asbestosis
024K2	Consistent with asbestosis
025H4	Consistent with asbestosis
025K2	Consistent with asbestosis
026H4	Consistent with asbestosis
026K2	Consistent with asbestosis, rule out cancer on both sides, see the doctor
027H2	Consistent with asbestosis, enlarged heart, see the doctor
027K2	Consistent with asbestosis
028H4	Consistent with asbestosis
028K2	Consistent with asbestosis
029H2	Consistent with asbestosis
029K2	Consistent with asbestosis, rule out cancer left midzone, see the doctor
030H2	Consistent with asbestosis, rule out cancer left lower zone, see the doctor
030K2	Consistent with asbestosis
031H2	Consistent with asbestosis
031K2	Consistent with asbestosis
032H2	Consistent with asbestosis, rule out cancer left midzone, see the doctor
032K2	Consistent with asbestosis
033H4	Consistent with asbestosis and asbestos related disease
033K2	Consistent with asbestosis
034H2	Consistent with asbestosis
034K2	Consistent with asbestosis
035H2	Consistent with asbestosis
035K2	Consistent with asbestosis, enlarged heart, see the doctor, rule out, etc

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Exam ID	[redacted]
036H2	Consistent with asbestosis
036K2	Consistent with asbestosis
037H2	Consistent with asbestosis
037K2	Consistent with asbestosis, rule out cancer left lower zone, see the doctor
038H2	Consistent with asbestosis
038K2	Consistent with asbestosis
039H2	Consistent with asbestosis
039K2	Consistent with asbestosis and asbestos related disease, rule out, etc
040H4	Consistent with asbestosis and asbestosis related disease
040K2	Consistent with asbestosis
041H2	Consistent with asbestosis
041K2	Consistent with asbestosis
042H2	Findings compatible with pulmonary asbestosis
042K2	Consistent with asbestosis
043K2	Consistent with asbestosis, rule out cancer left midzone, see the doctor
044H2	Findings compatible with pulmonary asbestosis, cardiomegaly
044K2	Consistent with asbestosis, rule out cancer on the right, see the doctor
045H2	Consistent with asbestosis
045K2	Consistent with asbestosis
048H2	Findings compatible with pulmonary asbestosis
048K2	Consistent with asbestosis
047H2	Consistent with asbestosis
047K2	Consistent with asbestosis
048H2	Findings compatible with pulmonary asbestosis, cardiomegaly
048K2	Consistent with asbestosis
049H2	Findings compatible with pulmonary asbestosis
050H2	Findings compatible with pulmonary asbestosis
050K2	Consistent with asbestosis
051H2	Findings compatible with pulmonary asbestosis, obstructive lung disease
051K2	Consistent with asbestosis
052H2	Findings compatible with pulmonary asbestosis
052K2	Consistent with asbestosis
053H2	Findings compatible with pulmonary asbestosis, possible cardiomegaly
053K2	Consistent with asbestosis
054H2	Consistent with asbestosis
054K2	Consistent with asbestosis and asbestos related disease
055H2	Findings compatible with pulmonary asbestosis, gunshot wound, etc

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kExamID	[redacted]
055K2	Findings compatible with pulmonary asbestosis
056H2	Findings compatible with pulmonary asbestosis
056K2	Consistent with asbestosis
057H3	Findings compatible with pulmonary asbestosis
057K2	Consistent with asbestosis
058H2	Findings compatible with pulmonary asbestosis
058K2	Consistent with asbe[illegible]s and asbestos related disease
059K2	Findings compatible with pulmonary asbestosis
060H2	Findings compatible with asbestosis
060K2	Consistent with asbestosis
061H2	Consistent with asbestosis
061K2	Consistent with asbestosis, rule out cancer in the right hilum, see the, etc
062K2	Findings compatible with pulmonary asbestosis
063H2	Findings compatible with pulmonary asbestosis
063K1	Consistent with asbestosis, rule out cancer right midzone, see the doctor
064H2	Findings compatible with pulmonary asbestosis
064K2	Consistent with asbestosis
065H2	Findings compatible with pulmonary asbestosis
065K2	Consistent with asbestosis
066H2	Findings compatible with pulmonary asbestosis, cardiomegaly, etc
066K2	Consistent with asbestosis
067H2	Findings compatible with pulmonary asbestosis
067K2	Consistent with asbestosis, rule out cancer right apex, see the doctor
068H2	Consistent with asbestosis
068K2	Consistent with asbestosis
069H2	Findings compatible with pulmonary asbestosis
069K2	Consistent with asbestosis
070H2	Findings compatible with pulmonary asbestosis
070K2	Findings compatible with pulmonary asbestosis
071H2	Findings compatible with pulmonary asbestosis
071K2	Consistent with asbestosis, rule out cancer both bases, see the doctor
072H2	Findings compatible with pulmonary asbestosis
072K2	Consistent with asbestosis
073H2	Findings compatible with pulmonary asbestosis
073K2	Consistent with asbestosis
074H2	Findings compatible with pulmonary asbestosis, possible cardiomegaly
074K2	Consistent with asbestosis, rule out cancer right upper zone, see the doc

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Exam ID	[redacted]
075H4	Findings compatible with pulmonary asbestosis
075K2	Consistent with asbestosis and asbestos related disease
076H2	Findings compatible with pulmonary asbestosis
076K2	Findings compatible with pulmonary asbestosis, mild degenerative arthritis
077H2	Findings compatible with pulmonary asbestosis
077K2	Findings compatible with pulmonary asbestosis, obstructive lung disease
078H2	Findings compatible with pulmonary asbestosis, findings suggestive, etc
078K4	Findings compatible with pulmonary asbestosis
079K2	Consistent with asbestosis, rule out cancer right midzone, see the doctor
080H2	Findings compatible with pulmonary asbestosis
080K2	Consistent with asbestosis
081H2	Findings compatible with pulmonary asbestosis, possible left, etc
081K2	Findings compatible with pulmonary asbestosis, possible cardiomegaly
082H2	Findings compatible with pulmonary asbestosis
082K2	No evidence of pulmonary asbestosis is identified at this time
083H2	Findings compatible with pulmonary asbestosis
083K2	Consistent with asbestosis, enlarged heart, see the doctor
084H2	Findings compatible with pulmonary asbestosis, mild cardiomegaly
084K2	Findings compatible with pulmonary asbestosis
085K2	Consistent with asbestosis and asbestos related disease
086K2	Findings compatible with pulmonary asbestosis
087K2	Consistent with asbestosis
088K2	Findings compatible with pulmonary asbestosis, obstructive lung disease
089K2	Findings compatible with pulmonary asbestosis
090K2	Findings compatible with pulmonary asbestosis
091K2	Findings compatible with pulmonary asbestosis
092K4	Findings compatible with pulmonary asbestosis
093K2	Consistent with asbestosis and asbestos related disease
094K2	NR
095K2	Findings compatible with pulmonary asbestosis and degenerative arthritis
096K2	Findings compatible with pulmonary asbestosis
097K2	NR
098K2	Pulmonary asbestosis
099K4	NR
100K2	Findings compatible with pulmonary asbestosis

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Table 11b. Initial Radiologists' Impressions for Q and R

[redacted]

001Q	Findings compatible with pulmonary asbestosis and mild cardiomegaly
001R	Findings compatible with pulmonary asbestosis, extensive fibrosis LUL
002Q	Findings compatible with pulmonary asbestosis
002R	Findings compatible with pulmonary asbestosis
003Q	Findings compatible with pulmonary asbestosis
003R	Findings compatible with pulmonary asbestosis, previous cardiac, etc
004Q	Pleural thickening and interstitial fibrosis
004R	Findings compatible with pulmonary asbestosis
005Q	Findings compatible with pulmonary asbestosis
005R	Findings compatible with pulmonary asbestosis
006Q	Minimal evidence of pulmonary asbestosis at this time.
006R	Findings compatible with pulmonary asbestosis
007Q	Minimal evidence of pulmonary asbestosis
007R	Findings compatible with pulmonary asbestosis
008Q	Findings compatible with pulmonary asbestosis
008R	No radiographic evidence of pulmonary asbestosis
009Q	Minimal evidence of pulmonary asbestosis identified at this time
009R	Findings compatible with pulmonary asbestosis
010Q	Findings compatible with pulmonary asbestosis
010R	Findings compatible with pulmonary asbestosis
011Q	Findings compatible with pulmonary asbestosis
011R	Findings compatible with pulmonary asbestosis, possible mild cardiomegaly
012Q	Findings compatible with pulmonary asbestosis
012R	No significant radiographic evidence of pulmonary asbestosis
013Q	Findings compatible with pulmonary asbestosis
013R	Findings compatible with pulmonary asbestosis
014Q	Findings compatible with pulmonary asbestosis
014R	Findings compatible with pulmonary asbestosis, gunshot wound
015Q	Findings compatible with pulmonary asbestosis
015R	Findings compatible with pulmonary asbestosis
016Q	Findings compatible with pulmonary asbestosis
016R	Findings compatible with pulmonary asbestosis
017Q	Findings compatible with pulmonary asbestosis

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[redacted]	[redacted]
017R	Findings compatible with pulmonary asbestosis
018Q	Minimal evidence of pulmonary asbestosis at this time
018R	Findings compatible with pulmonary asbestosis
019Q	Findings compatible with pulmonary asbestosis, elevation of the, etc
019R	Findings compatible with pulmonary asbestosis, mild cardiomegaly
020Q	Findings compatible with pulmonary asbestosis
020R	Findings compatible with pulmonary asbestosis, obstructive lung dis.
021Q	Findings compatible with pulmonary asbestosis
021R	Findings compatible with pulmonary asbestosis
022Q	Findings compatible with pulmonary asbestosis
022R	Findings compatible with pulmonary asbestosis
023Q	Findings compatible with pulmonary asbestosis
023R	Findings compatible with pulmonary asbestosis
024Q	Findings compatible with pulmonary asbestosis
024R	Findings compatible with pulmonary asbestosis
025Q	Findings compatible with pulmonary asbestosis, etc
025R	Findings compatible with pulmonary asbestosis
026Q	Findings compatible with pulmonary asbestosis
026R	Findings compatible with pulmonary asbestosis
027Q	Findings compatible with pulmonary asbestosis, probable hiatus hernia, etc
027R	No radiographic evidence of pulmonary asbestosis at this time
028Q	Findings compatible with pulmonary asbestosis
028R	Findings compatible with pulmonary asbestosis
029Q	Findings compatible with pulmonary asbestosis
029R	Findings compatible with pulmonary asbestosis
030Q	Findings compatible with pulmonary asbestosis, mild cardiomegaly
030R	Findings compatible with pulmonary asbestosis
031Q	Findings compatible with pulmonary asbestosis
031R	No radiographic evidence of pulmonary asbestosis is identified at this time
032Q	Findings compatible with pulmonary asbestosis
032R	Findings compatible with pulmonary asbestosis
033Q	Findings compatible with pulmonary asbestosis, possible mild cardiomegaly
033R	Findings compatible with pulmonary asbestosis
034Q	Findings compatible with pulmonary asbestosis, exam should be repeated, etc
034R	Findings compatible with pulmonary asbestosis
035Q	Findings compatible with pulmonary asbestosis
035R	Gunshot wound, findings compatible with pulmonary asbestosis

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036Q	Findings compatible with pulmonary asbestosis
036R	Findings compatible with pulmonary asbestosis
037Q	Findings compatible with pulmonary asbestosis
037R	Findings compatible with pulmonary asbestosis
038Q	Findings compatible with pulmonary asbestosis
038R	Findings compatible with pulmonary asbestosis
039Q	No radiographic evidence of pulmonary asbestosis is identified at this time
039R	Findings compatible with pulmonary asbestosis
040Q	Findings compatible with pulmonary asbestosis
040R	Findings compatible with pulmonary asbestosis
041Q	Findings compatible with pulmonary asbestosis
041R	Findings compatible with pulmonary asbestosis
042Q	Findings compatible with pulmonary asbestosis
042R	Findings compatible with pulmonary asbestosis
043Q	Findings compatible with pulmonary asbestosis
043R	Findings compatible with pulmonary asbestosis
044Q	Findings compatible with pulmonary asbestosis
044R	Findings compatible with pulmonary asbestosis
045Q	Findings compatible with pulmonary asbestosis
045R	Findings compatible with pulmonary asbestosis
046Q	Findings compatible with asbestosis
046R	Findings compatible with pulmonary asbestosis
047Q	Findings compatible with pulmonary asbestosis, mild cardiomegaly, etc
047R	Findings compatible with pulmonary asbestosis
048Q	Findings compatible with pulmonary asbestosis
048R	Findings compatible with pulmonary asbestosis
049Q	Findings compatible with pulmonary asbestosis, slight elevation, etc
049R	Findings compatible with pulmonary asbestosis
050Q	Findings compatible with pulmonary asbestosis
050R	Findings compatible with pulmonary asbestosis
051Q	Findings compatible with pulmonary asbestosis, left lower lobe, etc
051R	Findings compatible with pulmonary asbestosis
052Q	Findings compatible with pulmonary asbestosis
052R	Findings compatible with pulmonary asbestosis
053Q	Findings compatible with pulmonary asbestosis
053R	Findings compatible with pulmonary asbestosis
054Q	Findings compatible with pulmonary asbestosis

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054R	Findings compatible with pulmonary asbestosis
055Q	Findings compatible with pulmonary asbestosis
055R	Findings compatible with pulmonary asbestosis
056Q	Findings compatible with pulmonary asbestosis
056R	Findings compatible with pulmonary asbestosis, cardiomegaly, etc
057Q	Findings compatible with pulmonary asbestosis
057R	Findings compatible with pulmonary asbestosis
058Q	Findings compatible with pulmonary asbestosis
058R	Mild cardiomegaly, minimal evidence of pulmonary asbestosis
059Q	Minimal evidence of pulmonary asbestosis at this time
059R	Findings compatible with pulmonary asbestosis
060Q	Findings compatible with pulmonary asbestosis
060R	Findings compatible with pulmonary asbestosis, bilateral breast, etc
061Q	Findings compatible with pulmonary asbestosis
061R	Findings compatible with pulmonary asbestosis
062Q	Findings compatible with pulmonary asbestosis
062R	Findings compatible with pulmonary asbestosis, etc
063Q	Findings compatible with pulmonary asbestosis
063R	Findings compatible with pulmonary asbestosis
064Q	Findings compatible with pulmonary asbestosis
064R	Findings compatible with pulmonary asbestosis, slight elevation, etc
065Q	Findings compatible with pulmonary asbestosis, obstructive lung disease
065R	Findings compatible with pulmonary asbestosis
066Q	Findings compatible with pulmonary asbestosis
066R	Findings compatible with pulmonary asbestosis
067Q	Findings compatible with pulmonary asbestosis
067R	Findings compatible with pulmonary asbestosis
068Q	Findings compatible with pulmonary asbestosis, obstructive lung disease
068R	Findings compatible with pulmonary asbestosis
069Q	Findings compatible with pulmonary asbestosis
069R	Findings compatible with pulmonary asbestosis
070Q	Findings compatible with pulmonary asbestosis
070R	Findings compatible with pulmonary asbestosis
071Q	Findings compatible with pulmonary asbestosis
071R	Findings compatible with pulmonary asbestosis
072Q	Findings compatible with pulmonary asbestosis
072R	Findings compatible with pulmonary asbestosis, gunshot wound

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EXAMINER'S ANSWER	
073Q	Severe scoliosis, findings compatible with pulmonary asbestosis
073R	Findings compatible with pulmonary asbestosis
074Q	No radiographic evidence of pulmonary asbestosis
074R	Findings compatible with pulmonary asbestosis
075Q	Findings compatible with asbestosis, previous neck surgery
075R	Findings compatible with pulmonary asbestosis
076Q	Findings compatible with pulmonary asbestosis
076R	Findings compatible with pulmonary asbestosis
077Q	Findings compatible with pulmonary asbestosis, obstructive lung, etc
077R	Findings compatible with pulmonary asbestosis
078Q	Findings compatible with pulmonary asbestosis
078R	Findings compatible with pulmonary asbestosis, cardiomegaly
079Q	Findings compatible with pulmonary asbestosis
079R	Findings compatible with pulmonary asbestosis
080Q	Findings compatible with pulmonary asbestosis
080R	Findings compatible with pulmonary asbestosis, an incidental finding, etc
081Q	Findings compatible with pulmonary asbestosis
081R	Findings compatible with pulmonary asbestosis
082Q	Findings compatible with pulmonary asbestosis
082R	Findings compatible with pulmonary asbestosis
083Q	Findings compatible with pulmonary asbestosis
083R	Findings compatible with pulmonary asbestosis
084Q	Findings compatible with pulmonary asbestosis
084R	Findings compatible with pulmonary asbestosis
085Q	Findings compatible with pulmonary asbestosis, slight elevation, etc
085R	Findings compatible with pulmonary asbestosis
086Q	Findings compatible with pulmonary asbestosis
086R	Findings compatible with pulmonary asbestosis
087Q	Findings compatible with pulmonary asbestosis, mild cardiomegaly, etc
087R	Findings compatible with pulmonary asbestosis, mild cardiomegaly
088Q	Findings compatible with pulmonary asbestosis, obstructive lung dis., etc
088R	Findings compatible with pulmonary asbestosis
089Q	Findings compatible with pulmonary asbestosis
089R	Mild cardiomegaly, bilateral interstitial pulmonary fibrosis
090Q	Findings compatible with pulmonary asbestosis
090R	Compatible with pulmonary asbestosis
091Q	Mild bilateral interstitial fibrosis consistent with asbestosis, etc

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091R	Findings compatible with pulmonary asbestosis
092Q	Findings compatible with pulmonary asbestosis
092R	Findings compatible with pulmonary asbestosis
093Q	Findings compatible with pulmonary asbestosis
093R	Findings compatible with pulmonary asbestosis
094Q	Findings compatible with pulmonary asbestosis, possible mild cardiomegaly
094R	Findings compatible with pulmonary asbestosis
095Q	Findings compatible with pulmonary asbestosis
095R	Findings compatible with pulmonary asbestosis
096Q	Findings compatible with pulmonary asbestosis
096R	Findings compatible with pulmonary asbestosis
097Q	Findings compatible with pulmonary asbestosis, cardiomegaly, etc
[illegible]	Findings suggestive of asbestosis
098Q	Findings compatible with pulmonary asbestosis
098R	Findings compatible with pulmonary asbestosis
099Q	Findings compatible with pulmonary asbestosis, mild compression, etc
099R	Findings compatible with pulmonary asbestosis
100Q	Findings compatible with pulmonary asbestosis, possible right, etc
100R	Findings compatible with pulmonary asbestosis
101Q	Findings compatible with pulmonary asbestosis
101R	Findings compatible with pulmonary asbestosis
102Q	Findings compatible with pulmonary asbestosis
102R	Findings compatible with pulmonary asbestosis, mild cardiomegaly
103Q	Findings compatible with pulmonary asbestosis
103R	Bilateral lateral thoracic wall thickening consistent w/pulmonary asbestosi
104Q	Findings compatible with pulmonary asbestosis
104R	Findings compatible with pulmonary asbestosis
105Q	Findings compatible with pulmonary asbestosis
105R	Findings compatible with pulmonary asbestosis
106Q	Findings compatible with pulmonary asbestosis, mild cardiomegaly
106R	Pulmonary asbestosis, possible occult hilar mass, etc
107Q	Findings compatible with pulmonary asbestosis
107R	Findings compatible with pulmonary asbestosis
108Q	Consistent with asbestosis
108R	Findings compatible with pulmonary asbestosis
109Q	Findings compatible with pulmonary asbestosis
109R	Findings compatible with pulmonary asbestosis

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110Q	Findings compatible with pulmonary asbestosis
110R	Findings compatible with pulmonary asbestosis.
111Q	Findings compatible with pulmonary asbestosis
111R	NR
112Q	Findings compatible with pulmonary asbestosis
112R	Findings compatible with pulmonary asbestosis
113Q	Findings compatible with pulmonary asbestosis
113R	No radiographic evidence of pulmonary asbestosis at this time
114Q	Findings compatible with pulmonary asbestosis
114R	Findings compatible with pulmonary asbestosis
115Q	Cardiomegaly, findings compatible with pulmonary asbestosis
115R	Findings compatible with pulmonary asbestosis
116Q	Findings compatible with pulmonary asbestosis
116R	Findings compatible with pulmonary asbestosis
117Q	Findings compatible with pulmonary asbestosis, cardiomegaly
117R	Findings compatible with pulmonary asbestosis
118Q	Findings compatible with pulmonary asbestosis
118R	Findings compatible with pulmonary asbestosis
119Q	Findings compatible with pulmonary asbestosis
119R	Findings compatible with pulmonary asbestosis, right carotid, etc
120Q	Findings compatible with pulmonary asbestosis
120R	Findings compatible with pulmonary asbestosis, previous coronary, etc
121Q	Findings compatible with pulmonary asbestosis
121R	Findings compatible with pulmonary asbestosis
122Q	Findings compatible with pulmonary asbestosis
122R	Findings compatible with pulmonary asbestosis
123Q	Previous right thoracotomy, findings compatible with pulmonary asbestosis
123R	Findings compatible with pulmonary asbestosis
124Q	Findings compatible with pulmonary asbestosis, previous abdomical, etc
124R	Findings compatible with pulmonary asbestosis
125Q	Findings compatible with pulmonary asbestosis
125R	Findings compatible with pulmonary asbestosis
126Q	Findings compatible with pulmonary asbestosis, obstructive lung disease
126R	Findings compatible with pulmonary asbestosis
127Q	Minimal evidence of pulmonary asbestosis
127R	No radiographic evidence of pulmonary asbestosis
128Q	Findings compatible with pulmonary asbestosis

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128R	Findings compatible with pulmonary asbestosis
129Q	Findings compatible with pulmonary asbestosis, cardiomegaly
129R	Findings compatible with pulmonary asbestosis
130Q	No radiographic evidence of pulmonary asbestosis
130R	No radiographic evidence of pulmonary asbestosis at this time
131Q	Findings compatible with pulmonary asbestosis
131R	Findings compatible with pulmonary asbestosis
132Q	Old gunshot wound, findings compatible with pulmonary asbestosis
132R	RUL lung mass, recommend CT, findings compatible with pulmonary asbestosis
133Q	Findings compatible with pulmonary asbestosis
133R	Findings compatible with pulmonary asbestosis
134Q	Findings compatible with pulmonary asbestosis, possible mild cardiomegaly
134R	Findings compatible with pulmonary asbestosis
135Q	No radiographic evidence of pulmonary asbestosis is identified at this time
135R	Findings compatible with pulmonary asbestosis, mild cardiomegaly
136Q	Findings compatible with pulmonary asbestosis
137Q	Findings compatible with pulmonary asbestosis
138Q	Findings compatible with pulmonary asbestosis
139Q	Findings compatible with pulmonary asbestosis, compression fractures, etc
140Q	Findings compatible with pulmonary asbestosis
141Q	Findings compatible with pulmonary asbestosis, previous thoracotomies, etc
142Q	Findings compatible with pulmonary asbestosis
143Q	Findings compatible with pulmonary asbestosis, possible mild cardiomegaly
144Q	Findings compatible with pulmonary asbestosis
145Q	Findings compatible with pulmonary asbestosis
146Q	Findings compatible with pulmonary asbestosis, cardiomegaly
147Q	Findings compatible with pulmonary asbestosis
148Q	Findings compatible with pulmonary asbestosis
149Q	Findings compatible with pulmonary asbestosis
150Q	Findings compatible with pulmonary asbestosis
151Q	Findings compatible with pulmonary asbestosis
152Q	Findings compatible with pulmonary asbestosis
153Q	Findings compatible with pulmonary asbestosis
154Q	Partial right pneumonectomy, findings compatible with pulmonary asbestosis

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Table 11c. Examing Intamists' initial impressions for Groups H and K

ExamID	[redacted]
001H2	NR
001K2	Asbestosis and some pulmonary impairment
002H2	Pulmonary asbestosis
002K2	Asbestosis
003H2	NR
003K3	Asbestosis and some pulmonary asbestosis
004H2	Pulmonary asbestosis
004K2	Asbestosis
005H2	Pulmonary asbestosis
005K2	Pulmonary asbestosis
006H2	Pulmonary asbestosis
006K2	NR
007H2	Pulmonary asbestosis
007K2	Asbestosis and some pulmonary impairment
008H2	Pulmonary asbestosis, severe hypertensive disease, uncontrolled
008K2	Pulmonary asbestosis with pulmonary impairment
009H2	Pulmonary asbestosis
009K2	Asbestosis and asbestos related disease
010H3	Pulmonary asbestosis
010K2	Asbestosis and some pulmonary impairment
011H2	Pulmonary asbestosis
011K2	NR
012H2	Pulmonary asbestosis
012K2	NR
013H2	Pulmonary asbestosis
013K2	NR
014H2	Pulmonary asbestosis
014K2	NR
015H3	Pulmonary asbestosis, chronic obstructive lung disease related to, etc
015K2	NR
016H2	Pulmonary asbestosis
016K2	NR
017H2	Pulmonary asbestosis

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Exam ID	[redacted]
017K2	NR
018H2	Pulmonary asbestosis, chronic obstructive lung disease
018K2	NR
019H2	Pulmonary asbestosis
019K2	NR
020H4	NR
020K2	NR
021H2	Asbestosis
021K2	NR
022H4	NR
022K2	NR
023H4	NR
023K2	NR
[illegible]	NR
024K2	NR
025H4	NR
025K2	NR
026H4	NR
026K2	Asbestosis
027H2	NR
027K2	Asbestosis and some pulmonary impairment
028H4	NR
028K2	Asbestosis
029H2	NR
029K2	NR
030H2	NR
030K2	NR
031H2	NR
031K2	NR
032H2	Asbestosis and some pulmonary impairment
032K2	NR
033H4	NR
033K2	NR
034H2	Asbestosis and some pulmonary impairment
034K2	NR
035H2	NR
035K2	NR

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Exam ID	
036H2	NR
036K2	Asbestosis and some pulmonary impairment
037H2	NR
037K2	Asbestosis
038H2	NR
038K2	Asbestosis
039H2	NR
039K2	Asbestosis and asbestos related disease
040H4	[illegible]
040K2	NR
041H2	NR
041K2	NR
042H2	Pulmonary asbestosis
042K2	NR
043K2	NR
044H2	NR
044K2	NR
045H2	Pulmonary asbestosis
045K2	NR
046H2	Pulmonary asbestosis
046K2	NR
047H2	NR
047K2	NR
048H2	Pulmonary asbestosis
048K2	NR
049H2	Pulmonary asbestosis
050H2	Pulmonary asbestosis
050K2	NR
051H2	Pulmonary asbestosis
051K2	Pulmonary asbestosis
052H2	Pulmonary asbestosis
052K2	Asbestosis and some pulmonary impairment
053H2	Pulmonary asbestosis
053K2	NR
054H2	NR
054K2	Asbestosis, asbestosis related disease and some pulmonary impairment
055H2	Pulmonary asbestosis

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ExamID	
055K2	Pulmonary asbestosis
056H2	Pulmonary asbestosis
056K2	Pulmonary asbestosis
057H3	Pulmonary asbestosis
057K2	NR
058H2	Pulmonary asbestosis
058K2	NR
059K2	Pulmonary asbestosis
060H2	Pulmonary asbestosis
060K2	NR
061H2	NR
061K2	Asbestosis and some pulmonary impairment
062K2	Pulmonary asbestosis
063H2	Pulmonary asbestosis
063K1	Asbestosis and some pulmonary impairment
064H2	Pulmonary asbestosis
064K2	Pulmonary asbestosis
065H2	Pulmonary asbestosis
065K2	NR
066H2	Pulmonary asbestosis
066K2	Pulmonary asbestosis
067H2	Pulmonary asbestosis
067K2	NR
068H2	NR
068K2	NR
069H2	Pulmonary asbestosis
069K2	NR
070H2	Pulmonary asbestosis
070K2	Pulmonary asbestosis
071H2	Pulmonary asbestosis
071K2	NR
072H2	Pulmonary asbestosis
072K2	NR
073H2	Pulmonary asbestosis
073K2	NR
074H2	Pulmonary asbestosis, hypertensive disease untreated, obstructive lung, etc
074K2	NR

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Exam ID	[redacted]
075H4	Pulmonary asbestosis
075K2	NR
076H2	Pulmonary asbestosis
076K2	Pulmonary asbestosis
077H2	Pulmonary asbestosis
077K2	Pulmonary asbestosis
078H2	Pulmonary asbestosis
078K4	Pulmonary asbestosis
079K2	Pulmonary asbestosis, right upper lung lesion, which may be a large, etc
080H2	Pulmonary asbestosis
080K2	Pulmonary asbestosis
081H2	Pulmonary asbestosis
081K2	Pulmonary asbestosis
082H2	Pulmonary asbestosis, hypertensive disease untreated
082K2	Pulmonary asbestosis
083H2	NR
083K2	NR
084H2	Pulmonary asbestosis
084K2	Pulmonary asbestosis
085K2	Pulmonary asbestosis
086K2	Pulmonary asbestosis
087K2	Pulmonary asbestosis
088K2	Pulmonary asbestosis
089K2	Pulmonary asbestosis
090K2	Pulmonary asbestosis
091K2	Pulmonary asbestosis
092K4	Pulmonary asbestosis
093K2	Pulmonary asbestosis
094K2	Silicoasbestosis
095K2	Pulmonary asbestosis
096K2	Pulmonary asbestosis
097K2	Pulmonary asbestosis
098K2	Pulmonary asbestosis
099K4	Pulmonary asbestosis
100K2	Pulmonary asbestosis

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Table 11d. Examing internists' initial impressions for Q and R

[redacted]

001Q	Pulmonary asbestosis and mild cardiomegaly
001R	Chest pain suggestive of angina pectoris, pulmonary asbestosis, etc
002Q	Asbestosis
002R	Pulmonary asbestosis
003Q	Pulmonary asbestosis
003R	Pulmonary asbestosis
004Q	Pulmonary asbestosis
004R	Severe pulmonary asbestosis
005Q	Pulmonary asbestosis
005R	Pulmonary asbestosis
006Q	Pulmonary asbestosis
006R	Pulmonary asbestosis, hypertensive disease well controlled
007Q	Pulmonary asbestosis
007R	Asbestosis
008Q	Pulmonary asbestosis
008R	Pulmonary asbestosis
009Q	Pulmonary asbestosis
009R	Pulmonary asbestosis
010Q	COLD and pulmonary asbestosis
010R	Hypertensive disease uncontrolled, pulmonary asbestosis
011Q	Pulmonary asbestosis
011R	Pulmonary asbestosis
012Q	Pulmonary asbestosis, COLD
012R	Pulmonary asbestosis
013Q	Pulmonary asbestosis
013R	Pulmonary asbestosis
014Q	Pulmonary asbestosis
014R	Pulmonary asbestosis, hypertensive disease, coronary artery disease
015Q	Pulmonary asbestosis, diabetes mellitus and essential hypertension
015R	Pulmonary asbestosis
016Q	Pulmonary asbestosis
016R	Pulmonary asbestosis, COLD
017Q	Pulmonary asbestosis

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Exhibit	Comments
017R	Pulmonary asbestosis
018Q	Pulmonary asbestosis
018R	Pulmonary asbestosis
019Q	Pulmonary asbestosis
019R	Pulmonary asbestosis, mild cardiomegaly
020Q	Pulmonary asbestosis
020R	COLD, pulmonary asbestosis
021Q	Pulmonary asbestosis
021R	Pulmonary asbestosis, insential hypertension, severe
022Q	Pulmonary asbestosis, COLD
022R	Pulmonary asbestosis
023Q	Pulmonary asbestosis
023R	Pulmonary asbestosis
024Q	Pulmonary asbestosis
024R	Pulmonary asbestosis
025Q	Pulmonary asbestosis
025R	Pulmonary asbestosis
026Q	Pulmonary asbestosis
026R	Pulmonary asbestosis
027Q	Pulmonary asbestosis
027R	Pulmonary asbestosis
028Q	Pulmonary asbestosis
028R	Pulmonary asbestosis
029Q	Pulmonary asbestosis, essential hypertension not well controlled on capulen
029R	Pulmonary asbestosis
030Q	Pulmonary asbestosis
030R	Pulmonary asbestosis
031Q	Pulmonary asbestosis
031R	Hypertensive disease severe uncontrolled, pulmonary asbestosis
032Q	Asbestosis
032R	Pulmonary asbestosis
033Q	Pulmonary asbestosis, possible mild cardiomegaly
033R	Pulmonary asbestosis
034Q	Renal failure on dialysis, pulmonary asbestosis
034R	Pulmonary asbestosis
035Q	Pulmonary asbestosis
035R	Pulmonary asbestosis, COLD, gunshot wound

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[redacted]

036Q	Pulmonary asbestosis
036R	Pulmonary asbestosis
037Q	Pulmonary asbestosis
037R	Pulmonary asbestosis
038Q	Hypertensive disease uncontrolled, pulmonary asbestosis
038R	Pulmonary asbestosis
039Q	Pulmonary asbestosis
039R	Pulmonary asbestosis
040Q	Pulmonary asbestosis
040R	Asbestosis
041Q	Pulmonary asbestosis, hypertensive disease
041R	COLD, pulmonary asbestosis
042Q	Pulmonary asbestosis
042R	Pulmonary asbestosis
043Q	Pulmonary asbestosis
043R	Pulmonary asbestosis
044Q	Pulmonary asbestosis
044R	Hypertensive disease uncontrolled, pulmonary asbestosis
045Q	Pulmonary asbestosis
045R	Pulmonary asbestosis
046Q	Pulmonary asbestosis, severe essential hypertensive disease
046R	Pulmonary asbestosis, COLD
047Q	Pulmonary asbestosis, mild cardiomegaly, mild obstructive, etc
047R	Pulmonary asbestosis
048Q	Pulmonary asbestosis
048R	Pulmonary asbestosis
049Q	Pulmonary asbestosis, COLD, slight elevation of the left hemidiaphragm
049R	Pulmonary asbestosis
050Q	Serious hypertensive disease, pulmonary asbestosis
050R	Pulmonary asbestosis
051Q	Pulmonary asbestosis, lower left lobe pulmonary nodule
051R	Pulmonary asbestosis
052Q	Pulmonary asbestosis
052R	Pulmonary asbestosis
053Q	Pulmonary asbestosis
053R	Hypertension disease not controlled, pulmonary asbestosis, etc
054Q	Pulmonary asbestosis

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[redacted]

054R	Pulmonary asbestosis
055Q	Pulmonary asbestosis
055R	Pulmonary asbestosis
056Q	Hypertensive Disease not well controlled, pulmonary asbestosis, etc
056R	Hypertensive Disease, pulmonary asbestosis, Cardiomegaly, etc
057Q	Obstuctive lung disease, pulmonary asbestosis
057R	Pulmonary asbestosis
058Q	Pulmonary asbestosis
058R	Pulmonary asbestosis, mild cardiomegaly
059Q	Pulmonary asbestosis
059R	Pulmonary asbestosis
060Q	Pulmonary asbestosis
060R	Pulmonary asbestosis
061Q	Pulmonary asbestosis
061R	Hypertensive disease severe uncontrolled, pulmonary asbestosis
062Q	Pulmonary asbestosis
062R	Asbestosis
063Q	Pulmonary asbestosis
063R	Pulmonary asbestosis
064Q	Pulmonary asbestosis
064R	Obstructive lung disease, pulmonary asbestosis, slight elevation, etc
065Q	COLD, pulmonary asbestosis
065R	Pulmonary asbestosis, borderline hypertensive disease
066Q	Pulmonary asbestosis
066R	Pulmonary asbestosis
067Q	Pulmonary asbestosis
067R	Pulmonary asbestosis
068Q	Coronary artery disease, pulmonary asbestosis
068R	Pulmonary asbestosis
069Q	Pulmonary asbestosis
069R	Pulmonary asbestosis
070Q	Pulmonary asbestosis
070R	Pulmonary asbestosis
071Q	Asbestosis
071R	Mixed disease - asbestosis, obstructive lung disease
072Q	Pulmonary asbestosis
072R	Hypertensive disease not controlled, pulmonary asbestosis, gunshot wound

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Exam ID	
073Q	Kyphoscoliosis, pulmonary asbestosis
073R	Pulmonary asbestosis
074Q	Pulmonary asbestosis
074R	Pulmonary asbestosis, COLD
075Q	Pulmonary asbestosis, hypertensive disease not well controlled, etc
075R	Pulmonary asbestosis
076Q	Pulmonary asbestosis
076R	Pulmonary asbestosis
077Q	COLD, pulmonary asbestosis
077R	Pulmonary asbestosis
078Q	Pulmonary asbestosis, COLD
078R	Hypertensive disease not well controlled, pulmonary asbestosis
079Q	Pulmonary asbestosis
079R	Pulmonary asbestosis
080Q	Pulmonary asbestosis
080R	Pulmonary asbestosis
081Q	Pulmonary asbestosis
081R	Pulmonary asbestosis
082Q	Asbestosis
082R	Pulmonary asbestosis
083Q	Serious hypertensive disease, uncontrolled, pulmonary asbestosis
083R	Pulmonary asbestosis
084Q	Pulmonary asbestosis
084R	Pulmonary asbestosis
085Q	Pulmonary asbestosis, diabetes mellitus, slight elevation, etc
085R	Pulmonary asbestosis
086Q	Pulmonary asbestosis
086R	Pulmonary asbestosis
087Q	Pulmonary asbestosis, possible mild cardiomegaly, old gunshot wound
087R	Pulmonary asbestosis
088Q	COLD, pulmonary asbestosis
088R	Pulmonary asbestosis
089Q	Pulmonary asbestosis, COLD
089R	Essential hypertension, moderately severe, pulmonary asbestosis
090Q	Pulmonary asbestosis
090R	Pulmonary asbestosis
091Q	Severe insential hypertensive disease, pulmonary asbestosis

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091R	Pulmonary asbestosis
092Q	Hypertensive disease, not well controlled, pulmonary asbestosis
092R	Pulmonary asbestosis
093Q	Pulmonary asbestosis
093R	Pulmonary asbestosis
094Q	Pulmonary asbestosis, possible mild cardiomegaly
094R	Pulmonary asbestosis
095Q	Asbestosis
095R	Pulmonary asbestosis
096Q	Pulmonary asbestosis
096R	Pulmonary asbestosis
097Q	Diabetes mellitus, Pulmonary asbestosis, post carcinoma of colon, etc
097R	Pulmonary asbestosis
098Q	Essential hypertension, uncontrolled, pulmonary asbestosis, etc
098R	Pulmonary asbestosis
099Q	Pulmonary asbestosis
099R	COLD, pulmonary asbestosis
100Q	Pulmonary asbestosis, Athroscotic Heart Disease with atrail fibulation, etc
100R	Pulmonary asbestosis
101Q	Pulmonary asbestosis
101R	Pulmonary asbestosis, diabetes mellitus
102Q	Pulmonary asbestosis
102R	Pulmonary asbestosis
103Q	Pulmonary asbestosis
103R	Pulmonary asbestosis, serious hypertensive disease unattended
104Q	Pulmonary asbestosis
104R	Pulmonary asbestosis
105Q	Pulmonary asbestosis
105R	Pulmonary asbestosis
106Q	Asbestosis
106R	Pulmonary asbestosis
107Q	Pulmonary asbestosis
107R	Pulmonary asbestosis
108Q	NR
108R	Pulmonary asbestosis
109Q	Pulmonary asbestosis
109R	Pulmonary asbestosis

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110Q	Pulmonary asbestosis, essential hypertensive disease
110R	Pulmonary asbestosis, coronary heart disease
111Q	Pulmonary asbestosis
111R	Asbestosis, COLD
112Q	Hypertensive disease serious uncontrolled, pulmonary asbestosis
112R	Pulmonary asbestosis, hypertensive disease
113Q	Pulmonary asbestosis, essential hypertension
113R	Pulmonary asbestosis
114Q	Pulmonary asbestosis
114R	Pulmonary asbestosis
115Q	Hypertensive cardiovascular disease, pulmonary asbestosis
115R	Pulmonary asbestosis
116Q	Pulmonary asbestosis
116R	Pulmonary asbestosis
117Q	Pulmonary asbestosis
117R	Pulmonary asbestosis, COLD
118Q	Pulmonary asbestosis
118R	Pulmonary asbestosis
119Q	Pulmonary asbestosis
119R	Pulmonary asbestosis, right carotid artery calcification
120Q	Pulmonary asbestosis
120R	Coronary artery disease, pulmonary asbestosis, hypertensive disease, etc
121Q	Pulmonary asbestosis
121R	Pulmonary asbestosis
122Q	Pulmonary asbestosis
122R	Pulmonary asbestosis
123Q	Pulmonary asbestosis, previous right thoracotomy
123R	Pulmonary asbestosis, diabetes mellitus, essential hypertensive disease
124Q	Obstructive Disease, would consider Asthmatic Disease, Pulmonary Asb
124R	Pulmonary asbestosis
125Q	Pulmonary asbestosis
125R	Essential hypertensive disease, pulmonary asbestosis
126Q	Pulmonary asbestosis
126R	Pulmonary asbestosis
127Q	Pulmonary asbestosis
127R	Pulmonary asbestosis
128Q	Pulmonary asbestosis

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128R	Pulmonary asbestosis
129Q	Pulmonary asbestosis, hypertensive cardiovascular disease
129R	Pulmonary asbestosis, essential hypertension
130Q	Pulmonary asbestosis
130R	Pulmonary asbestosis
131Q	Pulmonary asbestosis
131R	Pulmonary asbestosis
132Q	Pulmonary asbestosis
132R	Pulmonary asbestosis
133Q	Pulmonary asbestosis
133R	Pulmonary asbestosis
134Q	Pulmonary asbestosis, hypertensive disease not well controlled, etc
134R	Pulmonary asbestosis
135Q	Pulmonary asbestosis
135R	COLD, pulmonary asbestosis
138Q	Diabetes mellitus status unknown, pulmonary asbestosis, etc
137Q	Pulmonary asbestosis
138Q	COLD, pulmonary asbestosis
139Q	Pulmonary asbestosis, compression fractures of mid thoracic, etc
140Q	Pulmonary asbestosis, COLD
141Q	Pulmonary asbestosis with severe restrictive disease
142Q	Pulmonary asbestosis
143Q	Pulmonary asbestosis, possible mild cardiomegaly
144Q	Pulmonary asbestosis
145Q	Pulmonary asbestosis
146Q	Asbestosis
147Q	Pulmonary asbestosis
148Q	Pulmonary asbestosis
149Q	Pulmonary asbestosis
150Q	Pulmonary asbestosis
151Q	Pulmonary asbestosis
152Q	COLD, pulmonary asbestosis
153Q	Hypertensive disease severe uncontrolled, pulmonary asbestosis
154Q	Postop carcinoma of the lung, partial R pneumonectomy, pulmonary asbestosis

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Table 12a. Other Comments* – Recorded by Consultant Readers for Group H

Reader: C1

01-H2 Peribronchial cuffing ® base
02-H2 nl extrapleural fat (L)/® wall - spurs of spine on ®
03-H2 ? early edema for s/t (0/1); tortuous aorta with Ca+
04-H2 elevated (L hilum (slight) dextrosiolosis upper thor. Spine
06-H2 Small nodule vs granuloma (L) P angle - need old file comparison
07-H2 -s/t (1/0) could be edema in view of "co" -pacer in place
11-H2 Spurs of T-spine. ? artifact/nipple (L) 5th ant. Rib
12-H2 ? nipple/nodule ® base - need nipple marker view
13-H2 on lateral inferior hilar node/vessel - need old film comparison
15-H3 Tortuous aorta Ca+ granuloma RUZ
19-H2 Cardiac pacer/calcified granuloma ® MZ
20-H4 Prior CABG/no pq on obliques
21-H2 Scarring (L) mid zone-/non-pneumoniotic
22-H4 Obliques (no pq)
23-H4 Obliques - no pq
25-H4 Obliques - no pq
26-H4 Obliques - no pq
27-H2 Ca+ granulomas ® and (L)UZ
28-H4 Obliques - no pq
29-H2 ® 10th rib seems more dense than others - likely WNL - AP of ribs would help
30-H2 CA mass or scar at (L) heart border - need old film comparison to evaluate, possible CT - "nodule" nearby could be nipple. Need PA with nipple marker
31-H2 "Ca+" (L) lower chest may be artifact - not seen on lateral/obliques would help - prior abd surgery. Ca+ abd. Aorta

*NIOSH Form Item 4C.

32-H2 CA at (L) 3rd ant. Rib- need work-up - plate atelectasis each base - spurs at T-spine. Mass over heart on lateral
33-H4 Oblique help confirm 0/0 lump (light exposure on PA can simulate disease) prior abd. Surgery
34-H2 Ca+ granuloma likely ® supralular area (not seen on lateral)
35-H2 Unusual "stripped " pattern each base (RZL) with Ca+ (? Old infection) ?Classification in lung - doesn't appear pneumonconistic - HRCT would help to clarify - prior sternotomy - ? Ca+ granuloma over upper T-spine on lateral - need old films
36-H2 Prior CABG
37-H2 Ca+ RUZ - granuloma
38-H2 CA and TB, ? LUZ at clavicle - need old film comparison - buckshot at post chest wall
40-H4 Obliques - no pq
44-H2 Trachea deviated to ® (?due to flexed neck) need repeat PA with neck extended.
50-H2 Ca+ granuloma RLZ
51-H2 Ca+ granuloma and local "em" at RUZ
52-H2 Although U/R disease present but hard to grade due to problems noted.
55-H2 Buckshot (L) chest
58-H2 Plate atelectasis (L) base
59-H3 Plate atelectasis (L) base
61-H2 Fat at ® CP angle
62-H3 Fat at ® CP angle most likely
64-H2 Although U/R, disease likely present but can't grade due to technical items noted
66-H2 Barely readable! Heart upper nl size
67-H2 Tortuous versus mildly aneurysmal aortic arch -need old film comparison
69-H2 Barely readable!
70-H2 Bilasilar mild atelectasis heart upper nl size/tortuous aorta
71-H2 ? gallstone or artifact on lat. Chest (abd. Area)
72-H2 Bilat. Cerv. Ribs
73-H2 Mild ® base. Atelectasis
74-H2 Spinal rods lower thor/upper lumbar area
78-H4 Ca+ at aorta ductus obliques show Ca+ granuloma (L) base, but no pq. Tortuous or sl. Aneurysmal asl. Aorta need old film comparison
79-H4 See comments #78

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82-H2 Likely spur at mid to lower T-spine on (L) seen thru prox. Desc. aorta
83-H2 Calcified granuloma likely LUZ - need old film comparison to be more secure
84-H2 Heart upper nl size – narrow AP chest diameter

Reader: C2

04-H2 Bilateral apical pleural thickening
07-H2 Cardiomegaly; pacemaker; left 6th rib interspace opacity probably represents nipple
11-H2 Small upper lung zone calcifications may represent granulomata, or calcified en face plaque
15-H3 Right apical infiltrate or fibrosis probably represents old Tbc. Small granulose ® UZ.
18-H2 ® apical pleural thickening and (L) apical calcified nodule c/w old Tbc.
19-H2 Cardiac pacemaker. Calcified granuloma RLZ. Bilateral apical pleural and parenchymal changes c/w old Tbc or other granulations dse. Possible cavity ® apex.
20-H4 S/P CABS (coron. Ant. Bypass surgery) granuloma RLZ
21-H2 Unilateral left anterior pleural - parenchymal pulmonary adhesions, probably old post inflammatory residual. Small calcified nodules upper zones c/w granulomata
25-H4 Mild T6 & T7 vertebrae compressions. Suspect mild upper lobe emphysema
27-H2 Bilateral upper lobe calcified and non-calcified nodules c/w old Tbc or _____ dse. Lateral view suggestive of emphysema
28-H4 Oblique views fail to confirm plaque
30-H2 Nonspecific (L) anterior pleural - pericardial adhesion/thickening. Several calcified lower zone granulomata.
31-H2 Calcifications LLZ are probably pulmonary parenchymal rather than plaque.
32-H2 Bilateral healed/healing rib fx's and possibly related non- specific pleural thickening and basilar atelectasis ® CP angle
33-H4 Surgical clips LVQ abdomen metallic sutures ant. Abd.
34-H2 Calcified node ® hilum granulomata lung bases
35-H2 Post OP sternum flattened diaphragms; probably emphysema upper lobes
36-H2 Post OP chest - CABS ® apical nodule of uncertain significance
38-H2 (L) apical lesion needs eval. F.b.'s chest wall
44-H2 Posterior hemispheric diaphragmatic 4 cm. Lesion - possible. Back datet. Hernia versus other?
45-H2 Calcified granuloma ® ML
50-H2 Small granuloma RLZ

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51-H2 ® apical granuloma
53-H2 Enlarged cardiac silhouette. Very poor technique
55-H2 Metallic f.b.s. chest wall
56-H2 1 cm. Opacity LLZ c/w nipple
57-H2 Upper zone calcifications c/w granulomata, RLZ too
61-H2 Duplicate of #62
62-H3 Same pt as #61, but better technique
64-H2 LUZ lateral pulm. Opacity c/w active disease, possible consolidation. Poor technique obscures pleural. Possible nipple shadow RLZ 5th i.s.
67-H2 Pleural significantly obscured
68-H2 Mild emphysema suspected on EPA (continued on lat1)
70-H2 Cardiomegaly
72-H2 ® rib anomaly
74-H2 T-spine instrumentation
78-H4 Same as #79
79-H4 Same as #78
83-H2 Bilateral rib fx's (old) Calcified granuloma LUZ
84-H2 Pectus excavation deformity. Serious technical flaw makes film nearly unreadable! Reexamination recommended

Reader: C3

02-H2 Subplenol fat
07-H2 Lateral unsatisfactory. Nodule left bare prob. Nipple. Changes probably on basis of chronic congestive failure and not pneumoconiosis
10-H3 Lateral unsatisfactory
15-H3 Old granulomatous decrease. rt apex aortic eclarea
19-H2 Pacemaker. Old granulomatous disease both apece
21-H2 Post inflammatory changes. Left mid-lung field with pleural parenchymal fibrosis . Old fx rt 8th rib Changes not pneumoconiosis
27-H2 I'll define nodular densely LUL - etiology? Compare with old films

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29-H2 Motion on lateral
30-H2 Pleura Pericardial adherion left
31-H2 Lateral very dark
32-H2 Nodule left mid-lung. RO carcinoma. Old rib fx bilat. Part inflam. heavy, left CP angle. Breathing on lateral
35-H2 Previous surgery. Aortic ectaria
38-H2 Previous gunshot wounds. ? Left apex behind clavicle lateral very poor - motion Get_____ film
42-H2 Lateral bad - breathing
44-H2 Alberomlecatic aorta. Calcified granuloma
51-H2 Old calcified granuloma. rt apex
52-H2 Abnormal chest wall to poor to classify
56-H2 Lat. Chest walls not visible
57-H2 Lateral chest walls not visible
64-H2 No lateral submitted
66-H2 Lateral chest walls not visible
79-H4 ???? deaphraymatic plaques in diaphragm
83-H2 Old rib fx's rt and left. Calcified granuloma left
84-H2 Nodule left. Prob. Nipple

Reader: C4

02-H2 (1) Cardiomegaly c/t = 17.5/32 (2) pleural thickening smooth, summetric - cannot exclude extrapleural fat
03-H2 Calcified aorta arch
04-H2 Scoliosis
06-H2 Scattered punctate calcified granuloma
07-H2 (1) Cardiomegaly c/t = 18/32 (2) pacemaker lt. Ant. chest wall with head in RV apex
10-H3 Excessive soft tissue
13-H2 (1) Cardiomegaly c/t 19/34 increase in parenchymal marking may be due to to CHF & underexposure
14-H2 Eventration of rt. hemidiaphragm
15-H3 Calcified granuloma right upper lung zone tortuous descending thoracic aorta
16-H2 Cardiomegaly with LV configuration

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19-H2 (1) Pacemaker lt ant. chest wall with lead in apex of RV
(2) Calcified granuloma mid-lung zone Rt.
(3) Lt apical pleural thickening
20-H4 Mid-line surgical sutures due to median sternotomy & C.A.B.G.
21-H2 (1) "crow's feet" pleural stranding - left lateral chest (linear stranding extending from lt mid-lung zone to pleural thickening lt lateral chest left wall enlarged)
27-H2 Punctate calcified granuloma - upper lobes bilat. Prob old TB
28-H4 Increase in parenchymal marking may be due to underexposure
29-H2 Scattered punctuate calcified granuloma
30-H2 Irregular infiltrate adjacent to left heart border scar need old films for comparison
31-H2 (1) severe hype(?) inflection
(2) punctate _____ density left mid-lung zone
(3) calcified aorta arch
(4) calcification of cartilagenous lower ribs
32-H2 (1) multiple rib # - old healed 9th post
(a) 1.5 x 1.5 cm lesion, lesion left mid-lung zone anterior portion of lt 3rd rib Need chest CT scan for localization
33-H4 Increase interstitial infiltrates confounded by underexposure. Repeat chest x-ray needed
35-H2 S/P median sternotomy Dilated descending thoracic aorta
36-H2 Hazy density partially silhouetting left heart border/lingular infiltrate
38-H2 2 punctate densely calcified lesions - right mid-lung zone probably soft tissue lesions due to buckshot
39-H2 (1) Irregular avoid-shaped lesions in lower lung zone bilat. Due to to calcification of cartilaginous portions of ribs
(2) boot-shaped LV configuration c/ 16/32
40-H4 Punctate densely calcified linear density across left mid-lower lung zone - ? artifact
43-H2 Underexposure may be a contributing factor in the apparent increase in parenchymal opacities
44-H2 (1) mid-thoracic scoliosis (2) cardiomegaly c/t = 17/32 (3) lt. Hemidiaphragm poorly visualized
45-H2 Underexposure may be a contributing factor in the increase in parenchymal infiltrates
47-H2 Underexposure may be a contributing factor in the increase in parenchymal infiltrates
48-H2 Fullness rt poratracheal area r/o adenopathy vs retrosternal thyroid vs vascular abrd
50-H2 Scattered calcified granulome
52-H2 (1) Despite poor quality of film, definite increase in interstitial infiltrates (2) repeat film recommended

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53-H2 Due to poor quality of film, it is not possible to determine whether the increase in parenchymal opacities is an artifact of the film technique (repeat chest x-ray)
55-H2 Buckshot in left lateral chest wall and subcutaneous tissues
56-H2 (1) elevated right hemidiaphragm (2) increase in parenchymal infiltrates probably due to underexposure
64-H2 Due to underexposure, the film technique may be a contributing factor in the increase in parenchymal opacities - repeat chest x-ray
66-H2 Underexposure may be a contributing factor in the increase in parenchymal marking, repeat chest x-ray recommended
67-H2 (1) _____widening probably secondary to _____ aorta
(2) underexposure a contributing factor in the increase in parenchymal markings
72-H2 Biconcave leaflets on rt. Hemidiaphragm
74-H2 Scoliosis
77-H2 (1) Obesity (2) effects of obesity and underexposure may be contributing to increase in parenchymal opacities
79-H4 Dilated ascending thoracic aorta
80-H2 Increase in parenchymal opacities may be due to overlying breast tissue
82-H2 Increase in parenchymal abnormalities may be due to overlying breast tissue and underexposure. Repeat film necessary
83-H2 0.8 x 0.8 cm nodular lesion LUL

Reader: C5

02-H2 Apparent pleural thickening is almost certainly caused by extrapleural deposition of fat
07-H2 Cardiac pacemaker
19-H2 Cardiac pacemaker
20-H4 Exam includes both oblique views as well as PA & lat. Sternotomy for C.A.B.G
22-H4 Exam includes both oblique views as well as PA & lat.
23-H4 Exam includes both oblique views as well as PA & lat.
25-H4 Exam includes both oblique views as well as PA & lat.
26-H4 This exam includes oblique views as well as PA & lat.
27-H2 Emphysema is predominantly lower zonal
28-H4 This exam includes oblique views as well as PA & lat.
30-H2 Suspect scarring in lingula

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32-H2 Bilateral costophrenic sinus pleural fibrosis is not of pneumoconiotic origin
33-H4 This exam includes both oblique views as well as PA & lat.
35-H2 Sternotomy for C.A.B.G.
36-H2 Sternotomy for C.A.B.G.
40-H4 This exam includes poorly exposed oblique views as well as PA & lat.
44-H2 Query mass adjacent to posterior portion of hemidiaphragm -probably left
50-H2 Emphysema is predominantly lower zonal
78-H4 This exam includes both oblique views as well as PA & lat.
83-H2 Pleural "plaque" on right almost certainly caused by extrapleural fibrosis secondary to fractured ribs

Reader: C6

01-H2 Mild flattening diaphragms ? COPD
02-H2 Pleural changes along lateral walls most likely due to extrapleural fat deposition
03-H2 Mild flattening diaphragms ? COPD (linear artifact Left apex)
05-H2 Small opacity R apex - prob. artifact - would repeat
06-H2 Tiny nodule L base - suggest flu
07-H2 Small nodule L base - prob. nipple - repeat nipple markers. Pacemaker in R.V. Cardiomegaly Pleural findings on right may be overlying chest wall shadows
15-H3 Parenchymal changes R apex - c/w TB activity in determinant. Several granulomas RUL COPD.
18-H Tiny nodule at L 2nd rib
19-H2 Mild scarring apices small calcified granuloma?? RML Pacemaker in RV COPD
20-H4 S/P C.A.B.G.
21-H2 Scarring in lingula with mild adjacent pleural thickening C/W Post-inflammatory changes COPD (old fx right 8th rib)
22-H4 Obliques - minimal extrapleural fat - normal
23-H4 Obliques normal
27-H2 Fibrocalcific nodular opacities both upper lobes probably secondary to TB or histo - showed c/w prior films ? COPD.
28-H4 (Mild extrapleural fat right wall) Obliques - normal
30-H2 Lingula - Prob. scar; c/w prior films nodular opacity Left 5th ant. inter space prob. Nipple shadow - suggest repeat PA & both obliques with nipple markers

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31-H2 Marked hyperacration, flattened diaphragm c/w COPD. Focal calcification at level Left 6th ant. Rib -- ? location - ? parenchymal ? pleural - obliques could localize

32-H2 (? Small pleural plaque right wall - could be related to rib fx's.) Nodular opacity at level Left. 3rd ant rib - ? rib fx callus; recommend repeat PA and both oblique views to r/o pulmonary nodule multiple old rib fx's; plate-like atel bases

33-H4 Obliques normal

35-H2 Sternotomy wires; ant. Surgical clips tiny granuloma RUL. Prob. Due to to C.A.B.G.

36-H2 Small (?cavity) nodule right apex ? TB ?CA S/P C.A.B.G.

38-H2 Multiple metallic pellets posterior chest wall

39-H2 Pleural findings on Left could be chest wall shadow rather than plaque obliques could help differentiate

40-H4 Obliques under penetrated but normal

44-H2 Top size heart. (small eventration left hemidiaphragm pleural findings may well represent extrapleural fat

45-H2 Unreadable

48-H2 Can't evaluate Left pleura

49-H2 Can't evaluate pleura

50-H2 (dd fractures Left 5th and 6th ribs) Small granuloma Right lower lung

51-H2 Small ovial nodule right apex - prob artifact - (?granuloma) - suggest repeat COPD

52-H2 Possible left hilar adenopathy

53-H2 Top sized heart right lateral wall limited evaluation

55-H2 Multiple metallic pellets left chest wall

56-H2 Cannot evaluate pleura lateral walls due to under penetration

61-H2 Pleural findings not definite - Obliques would help to evaluate

62-H3 Note: Same as case #61. Pleural findings not definitely plaques - Obliques would help

64-H2 Marked under penetrated - cannot visualize left lateral wall; cannot accurately grade profusion small opacities

67-H2 Tortuous, ectatic aorta oblique views would be helpful to confirm normal lateral walls

70-H2 Top sized heart; tortuous aorta (muscle shadows overlic lateral walls) mild plate-like Atel left base

72-H2 (Right cervical rib) (mild developmental deformity ribs bilat.)

78-H4 Small granuloma lingula prob. COPD

83-H2 Granuloma LUL multiple bilateral heated rib fractures

84-H2 ? Small nodule at Left 5th ant. Rib – could be nipple shadow or confluence rib & vessels; suggest repeat PA & both Obliques with nipple markers

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Table 12b. Other Comments* - Recorded by Consultant Readers for Group K

Reader: C1

01-K2 Walls too light to read – and Ca+ nodes L hilum --- Ca+ granuloma L base
02-K2 Lobulated upper L hilum likely vessel - old film comparison would help
03-K2 Plate atelectasis L base
05-K2 Walls too light to evaluate
07-K2 Ca+ old R hilar nodes
08-K2 Walls too light to evaluate
09-K2 Can't evaluate lateral walls (too light) – L base under-exposed (? Likely n/g based on lateral view)
10-K2 Prior CABG/Ca+ granuloma L base/likely extrapleural fat each wall (symmetrical)
15-K2 ? nodule R 6th ant. rib interspace - need old film comparison
16-K2 Too light to evaluate L – CP angle area
20-K2 Fat (nl shadows) each lateral wall (symmetrical)
21-K2 Fat lower lateral walls - likely Ca+ granuloma lower retrosternal area lateral view
22-K2 R CA mid-zone (3rd ant. rib) – CA L perihilar mass and Ca+ nodes
26-K2 Lateral walls too light to evaluate
28-K2 L wall too light to evaluate - plate atelectasis L base
29-K2 Although U/R, cancer or granuloma LUZ
30-K2 Ca+ granuloma L base and L Ca+ hilar node bullet seen on lat. view - upper chest
31-K2 L/R upper zone non pneumoconiotic scars likely/prior surgery G-E jct.
32-K2 R apex scar likely based on lateral view/need old films and apical ____ view
33-K2 Ca+ granuloma L base
34-K2 Scar RUZ (non-pneumoconiotic)
37-K2 Ca+ granuloma L base
38-K2 -? old trauma R acrom-clav. – likely Ca+ granuloma R base jct

*NIOSH Form Item 4C.

42-K2 Walls L/R too light to evaluate
43-K2 Non-pneumoconiotic R apical pleural thickening
44-K2 R hilum lobulagted – likely vessel – need old film comparison
48-K2 Nipple seen at each base
50-K2 Bases to light to evaluate surgery upper abdomen
52-K2 ? airspace disease R apex – need film to show apices
54-K2 Old trauma L chest most likely
57-K2 L lower paraspinal "mass" likely just buckled aorta
58-K2 Plate atelectasis R base/bony union of ribs likely on R 4-7 posteriorly – rib films would help
61-K2 Plate atelectasis R base – can't see lateral chest walls/prominent main pulm. artery segment)(? Any murmurs)
62-K2 Likely bilat extrapleural fat (symmetrical appearance)
63-K2 Plate atelectasis L base/opacity L base likely breast (pectoral) overlap/mass to R of trasaches likely tortuous vessel
64-K2 ? bone island L 6th ant. rib
65-K2 R lower paraspinal "mass" is tortuous desc. aorta
68-K2 Old L clavicle fx
70K-2 Bilat. extrapleural fat/lower mid thor disc. space on lat.view
71-K2 Plate atelectasis each base
73-K2 Plate atelectasis R mid-zone wall
74-K2 L 2nd lat. rib ? destroyed (versus trauma)-need rib films
75-K2 Prior CABG
76-K2 Calcified granuloma at L CP angle
77-K2 CA mass at R base anteriorly versus fluid in fissure – need old film comparison and work-up
78-K4 L wall too light to evaluate/oblique views WNL
79-K2 Although U/R – likely cancer sup. segment RLL versus post. RVL
80-K2 Although UR/sclerosis R acrom. clav. jct views of area would help
81-K2 L wall too light to evaluate ? calcification abdomen on lateral
83-K2 Although U/R, suspect airspace dis. at bases ? pneumonia
85-K2 Likely nipple at each lung base – prior CABG/unusual card. apex – need old film comparison
87-K2 Can't evaluate lateral walls too light

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88-K2 Large R hilar pulm. Artery (? Prior thromboembolism) – need old film comparison
91-K2 Lat. wails too light to evaluate - ? fat or venous anomaly to L of aortic knob
92-K2 Obliques WNL/Ca+ granuloma L base
94-K2 RUL collapse, suspect Ca/?R mastectomy nodules could be mets
96-K2 L wall too light to evaluate (? Scapula overlap also)
99-K4 Obliques WNL

Reader: C2

01-K2 Calcified granulomata L perihilar
07-K2 Calcified R. hilar nodes
08-K2 Small calcified granulomata
09-K2 L post rib interspace widening (6th) mid T-spine vert. body compressive and blouting of L CP angle c/w old trauma
10-K2 Post Op chest. Old granuloma LLZ
11-K2 Cannot reliably read for small opacities due to motion artifact
12-K2 Cardiomegaly. Multiple old rib fx's nonspecific pl. thickening c/w trauma.
13-K2 Mild perihilar infiltration, nonspecific, 5 mm nodule Rt 6th rib l/S laterally
14-K2 Calcified granuloma
18-K2 Calcified granuloma, RLZ Surgical clips esoph. hiatus.
21-K2 8mm. probably calcified nodule RLZ
22-K2 Multiple calcified granulomata and probably related non-calcified perihilar infiltrate of uncertain duration or activity non-specific L LZ pleural/parenchymal scar
27-K2 Cardiomegaly
29-K2 Multiple old rib fx's with adjacent pleural thickening c/w trauma. Calcif nodule LUZ
30-K2 Calcified granuloma LLZ and L hilum. Old???? _____ posteriorly
31-K2 P/O clips esoph. hiatus
32-K2 RUZ vol. loss & infiltrate c/w old tbc or other
33-K2 Calcified granulomata
35-K2 Calcified granuloma LLZ, cardiomegaly
36-K2 Small calcified granulomata

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37-K2 Calcified granuloma LLZ
38-K2 a/c joint abd widened
39-K2 Nonspecific volume loss, pleural thickening Rt CPA blunting Unilateral Rt suggests old pneumoconiosis or _____ etiol
43-K2 Rt apical pleural thickening, probably due to old tbcx
44-K2 Probable calcified Rt hilar node
45-K2 Minimal discoid atelectasis lt base
46-K2 Cannot accurately classify for small opacities due to poor technique
51-K2 L apical linear opacity c/w artifact or scar
54-K2 Lt rib & adjacent pleural thickening c/w old trauma
57-K2 Calcified granuloma RLZ
58-K2 Opacity Rt c/w interosseess bridging - old trauma
61-K2 Discoid atelectasis Rt
63-K1 Discoid atelectasis LLZ, abnormal pleural opacity LLZ - nonspecific
65-K3 Mild volume loss Lt lung
67-K2 Calcified Rt apical nodule probably of cartilage or other benign cause
68-K2 Old fx Lt clavicle
71-K2 Rib asilar discoid atelectasis
75-K2 P/O changes, non specific pleural thickening laterally on Rt
77-K2 Mass - like opacity lower polc Rt hilum or RML gynecomastia ?
79-K2 3cm opacity RUZ posteriorly suspicious for active _____. 1 cm opacity LUZ also suspicious P/O median sternotomy/CABS
85-K2 P/O CABS with nonspecific bilat. Mild pleural thickening
92-K2 Oc Cl Calcified granulomata
94-K2 RUL atelectasis of uncertain duration

Reader: C3

01-K2 High Contrast - Lat chest walls not visible
10-K2 Prior surgery. Calcified granuloma left
14-K2 SCa+ered calcified granuloma

20-K2 Lateral unsatisfactory - breathing
21-K2 Calcified nodule seen only on lateral. Pleural changes may only be subpleural fat
22-K2 Infiltrate vs. Main left hilar area. Nodular density rt med lung etiology? Atherosclerosis aorta. Linear showed left base - post inflammatory
26-K2 Lateral chest walls cannot be evaluated
29-K2 Lat chest walls not visible
30-K2 Calcified primary complex left. Metal (bullet) seen only on lateral
31-K2 31-K2 (1) Kyphiri (2) Old granuloma base disease both apese (3) Ortecpenes (4) Ant wedging D12 (5) Pul low both upper lobes
33-K2 Calcified granuloma left. Degen spondylosis
42-K2 AC joints
61-K2 Linear _____ vs fibrobic _____ RML- Not occupationally related
63-K1 Pleural changes only? Need lateral
67-K2 Atherosclerosis aorta.
71-K2 Disc atelectasis
74-K2 Trauma vs pathologic. Nodule Rt over 2nd ant. rib vs old fx. Old fx rt 3rd and 4th ribs ant
75-K2 Aorta ectasia pleural change most likely post op
77-K2 Atherosclerosis aorta.
94-K2 Prob right _____. Atherosclerosis aorta. Parenchymal changes may be metabolic

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Reader: C4

01-K2 Probable calcified granuloma left lower lung zone breast artifacts ↑ soft tissue in lower lung zones
03-K2 Enlargement of pulmonary outflow tract L > Rt
04-K2 Enlargement of the pulmonary vascular outflow tract – pulmonary hypertension prob due to COPD
07-K2 Calcified hilar nodes. Rt. > lt
09-K2 1) Left hemidiaphragm poorly visualized on PA film. Probably artifact 2) _____ calcified granuloma
10-K2 1) Calcified granuloma left mid-lung zone. 2) S/P CABG surgery/median sternotomy
11-K2 Boot shaped left ventricle. Tortuous aorta
12-K2 1) Multiple rib fractures with calcification due to healing bilaterally Rt >. Lt. 2) Due to poor quality film parenchymal opacities may be due to under-exposure
13-K2 Cardiomegaly C/T, O.S. need to cardiogenic pulmonary edema
14-K2 SCa+ered calcified granuloma
16-K2 Due to breast tissue the increasing parenchymal infiltrates may be artifact. REPEAT FILM.
22-K2 1) Enlarged left hilum mass. 2) ? soft tissue lesion RUL 3) calcified hilar nodes bilet
23-K2 Due to poor activity of film the apparent increase in parenchymal operates may be due to artifacts. REPEAT FILM.
25-K2 Thoracic osteophatic formations
26-K2 Due to poor quality of film parenchymal opacities may be due to artifacts. REPEAT FILM.
29-K2 Multiple _____ Lt > Rt
30-K2 Calcified Lt. hilar node. Calcified granuloma LLL
33-K2 SCa+ered calcified granuloma. Cardiomegaly
35-K2 1) Cardiomegaly R/O pulmonary edema, 2) calcified granuloma LLL
36-K2 Few sCa+ered calcified granuloma
37-K2 SPN Left lower lobe
39-K2 Rt. lateral _____ film to R/O effusion
44-K2 Bilat hilar adenopathy c/w sarcoidosis_____
49-K2 SCa+ered calcified granuloma Rt. > Lt
50-K2 Breast tissue superimposed over lung parenchyma artifactally parenchymal opacities
51-K2 Due to poor quality of film, the ↑ parenchymal opacities may be artifact. REPEAT FILM.
55-K2 Slight increase in parenchymal opacities probably due to artifact to under-exposure and low inspiration. REPEAT FILM.

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57-K2 Boot shaped left ventricle
60-K2 Film quality may be contributing to ↑ in parenchymal opacities. REPEAT FILM.
61-K2 Film quality may be contributing to ↑ in parenchymal opacities. REPEAT FILM.
63-K1 Hazy density overlying left lower lung zone ? soft tissue vs entire plaque. CT scan recommended
65-K3 1.) Slight increase in infiltrates left lower lung zones; probably due to soft tissue due to rotational artifact 2) Aorta arch calcification
66-K2 Slight increase in parenchymal opacities may be due to film _____. REPEAT FILM.
67-K2 Dileted thoracic aorta. Calcified aorta arch
68-K2 Cardiomegaly C/T O.b.
69-K2 Boot shaped left ventriculer configuration
71-K2 Plate-like atelectasis above Rt hemidiaphragm. Hazy density over Lt hemithorax probably due to rotational artifact.
73-K2 Cystic bronchiectatic changes RLL
74-K2 1) Ill-defined non-calcified density in RUL ____, 2) bony defect lateral _____ lst Lt rib with adjacent pleural based density R/O
75-K2 S/P CABG surgely
79-K2 S/P median sternotomy soft-tissue non calcified density Rt mid-lung zones - suspicious for CR. REPEAT FILM.
81-K2 Cardiomegaly C/T o.b. dileted thoracic aorta
83-K2 Cardiomegaly C/T 0.65 R/O acute pulmonary edema
85-K2 S/P CABG
88-K2 1) Prob. hilar adenopathy – bilat Rt > Lt. Need to R/O sarcoid (2) calcified density Lt apex ? Cartilaginous portion of lst rib vs parenchymal density
92-K2 # posterior aspect Rt 7th with callous formation
94-K2 RUL atelectasis - RUL _____
100-K2 1) dilated aorta arch; 2) calcified aorta arch; 3) cardiomegaly C/T o.b.

Reader: C5

01-K2 Under-exposure of lung bases and over-exposure of upper zones renders interpretation difficult. 0/1 does not indicate the presence of pneumoconiosis
04-K2 Pleural stripes invisible at lung periphery due to under-exposure
09-K2 0/1 profusion does not indicate presence of pneumoconiosis

10-K2 Sternotomy of an CABG
11-K2 Very small lung volumes (? caused by inadequate or sub-optimal inspiration) creates extreme difficulty in interpretation
12-K2 0/1 profusion does not indicate the presence of pneumoconiosis
20-K2 0/1 profusion does not indicate the presence of pneumoconiosis
23-K2 Low lung volume
26-K2 Pleural stripes not visible due to under-exposure
27-K2 0/1 profusion does not indicate the presence of pneumoconiosis
29-K2 Zone requires further investigation
31-K2 Emphysema creates false impression of mild interstitial disease
34-K2 Lateral view is unreadable
39-K2 Pleural fibrosis on right probably not caused by asbestos exposure, but 1: same unknown previous pleural or pulmonary insult. (e.g., infarct or hemothorax)
43-K2 Emphysema creates false impression of mild interstitial disease
48-K2 0/1 profusion does not indicate the presence of pneumoconiosis
51-K2 Pleural stripes invisible
52-K2 0/1 profusion does not indicate the presence of pneumoconiosis
60-K2 Pleural stripes invisible
63-K1 PA only
65-K3 0/1 profusion does not indicate the presence of pneumoconiosis
67-K2 Compare with previous films or recheck in 6 months.
75-K2 Status post-sternotomy for CABG
78-K4 Exam includes both obliques as well as PA and lat
79-K2 Unlikely to represent a large opacity of pneumoconiosis. 0/1 profusion does not indicate the presence of pneumoconiosis
83-K2 Pleural stripes invisible
84-K2 Pleural stripes invisible
85-K2 Status post-sternotomy for CABG
92-K2 Obliques plus PA & lat
94-K2 Further investigation required. Opacity in left apex could be a large opacity of pneumoconiosis
99-K2 Obliques plus PA & lat

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Reader: C6

01-K2 (Calcified granuloma LLL with CAH L hilar nodes.) Pleural changes along lateral walls may be due to extrapleural fat
03-K2 Minor plate-like atelectasis L base
09-K2 (Minor eventuation L hemidiaphragm)
10-K2 Calcified granuloma LLL surgical clips sternotomy wires prob due to CABG. Pleural findings could be due to chest wall shadows
11-K2 Plate-like atelectasis R base; minimal plate-like atelectasis L base
12-K2 Multiple bilateral _____ rib fractures. Mild pleural thickening R consistent with prior trauma
13-K2 Mild prominence hila appear vascular and WNL. Mild extrapleural fat along lateral walls
18-K2 Hyperactive lungs, flattened diagnosis suggest C.O.P.D.
21-K2 Dense nodule RML C/w granuloma pleural finding on L _____ will be due to overlying chest wall soft tissue
22-K2 Patching opacity lateral to L hilum; small irregular opacity at R 3rd ant. rib - These may be inflammatory changes; need to compare with prior films; flu films including obliques suggested calcified mediastial; scar left base
26-K2 (Lateral walls not well seen)
27-K2 Cannot evaluate parenchymal or pleura L base on PA – under penetrated
29-K2 Can't evaluate for pleural changes - post traumatic ____ in ribs. ? Pleural thickening. Possible nodule LUL; recommend repeat PA and both obliques chest with better penetration
30-K2 Gibson complex - calcified granuloma L base in calcified L hilar nodes. Bullet over 1.25 upper chest on lateral
31-K2 Scarring LUL - prob due to TB activity in determinant - should clw old films (upward _____ L hilum) Hyperactive lungs - suggests C.O.P.D.
32-K2 Fib nodular opacities - RUL R/O TB act. _____ Hyperactive lungs, flattened diaphragm suggest C.O.P.D.
33-K2 Calcified granuloma lingula
34-K2 Marked changes of emphysema (with resultant parenchymal compression bases)
35-K2 Calcified granuloma lingula. Mild extrapleural fat deposition lateral walls
36-K2 Tiny granuloma RLL
37-K2 Calcified granuloma LLL
39-K2 Pleural thickening right costophrenic angle c/w prior _____ effusion
43-K2 Hyperactive lungs flattened diaphragm. Suggest COPD, mild pleural R apex & scarring R to TB changes
45-K2 Small pleural plaque R lat wall equivocal

48-K2 Tiny nodule retrosternal region on lateral – prob tiny granuloma. (nipple shadows)
51-K2 Linear opacity L apex - likely artifact
53-K2 (Small opacity along R mid lateral wall felt to be serious muscle slips rather than pl plaque)
54-K2 Small area pleural or extrapleural thickening L mid lateral wall - associated in linear scarring in lung and adjacent informity L 6th rib likely post-traumatic
56-K2 Hyperactivation of lungs, flattened diaphragm - suggest prob COPD
58-K2 Opacity between R 4-7 post ribs. Prob _____ bridging between ribs and old trauma? Recommend repeat with obliques. Plate-like atal R base (small granuloma R lung)
61-K2 Plate-like atel R ML. Mild extrapleural fat bilaterally old fx R - 5th rib
63-K1 Linear atelectasis L mid lung; overlying soft tissue breasts
64-K2 Anomalous R 3rd ant. rib - no clinical significance
65-K3 (Tortuous aorta)
67-K2 Nodular opacity R apex - R/O TB, R/O CA (small linear scar LUL)
68-K2 (Old fx L clavicle)
70-K2 Old fx's R 7th and 8th post. ribs
71-K2 Minor plate-like atel both bases
73-K2 Nodular opacity L apex - suggest repeat PA and _____ obliques
74-K2 Healed fractures of R 1-4 ant. ribs; L 1-3 ribs
75-K2 S/P CABG; old fx's R 3rd & 4th ribs. Mild pleural thick along R lower lat wall - could well be due to prior trauma/surgery
77-K2 Avoid opacity lower major tissue R - ? fluid in tissue ("phantomy tumor"); pleural mass such as localized fibrous tumor pleura
79-K2 3ca nodule post R mid long R/O CA: (S/P sternotomy); T'd R diaphragm
82-K2 Scapula shadow along R wall
83-K2 Small granuloma RML. Minor plate-like atel L base
84-K2 Cannot adequately evaluate pleura under penetrated . Suggest repeat (lungs clear)
85-K2 (S/P sternotomy – CABG)
87-K2 Pleural finding on R could be chest wall shadow - obliques could help confirm
88-K2 Minor scarring R lateral lung. (tortuous aorta)
89-K2 Old fx L 6th rib
92-K4 Old fracture and post-traumatic _____ changes R 7th rib. Tiny calcified granuloma L base
94-K2 Atelectasis RUL - R/O endobronchial lesion - CA lung

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98-K2 Mild flattened diaphragms prob. CPOD (? Tiny granuloma R mid lung)
100-K2 (Tortuous aorta)

Table 12c. Other Comments*--Recorded by Consultant Readers for Groups Q and R

001R2	____ (Non-pneumoconiotic) left upper zone but stellate appearance - ? Cancer
001R2	Stellate LUZ opacity compatible with scar, chronic atelectasis, or tumor
001R2	Linear screening from left apex to left hilum
001R2	Etiology unclear but not currently significant
002Q1	Plate atelectasis LLZ
002Q1	Tiny area plate-like atelectasis left lower lung
003Q2	PA & LAO
003R2	_____ valve prosthesis
[illegible]2	S/P sternotomy with porcine aortic valve replacement
003R2	Cardiomegaly, sternotomy sutures S/P CABG
003R2	P/O CABS & valve, mild CHF
003R2	____ prosthesis/sternotomy/saber trachea (?COPD)
004Q2	PA & lateral
005Q1	Upper aortic knob (? Tortuous or aneurysm)
007Q1	Neck mass (? upper left lobe thyroid)
007Q1	Marked tracheal deviation to right- probably substernal goiter R/O mediastinal mass; overlying breast tissue may contribute to upper parenchymal
007R1	Plate atelectasis left base
008Q2	Old fracture left clavicle, sl. levoscolioses
008Q2	PA & lateral
008R1	Cardiomegaly, obesity
008R1	Repeat film
008R1	Pulmonary changes inconsistent with a diagnosis of pneumoconiosis
008R1	Soft tissue obscures lateral walls, especially on right
009Q2	PA & lateral
010Q2	Plate atelectasis left base
010Q2	PA & LAO
010R2	Chest wall shadow right lateral wall
011Q2	PA & RAO
011Q2	Normal extrapleural fat shadow right lateral wall on RAO oblique view
012Q2	PA & lateral
013Q2	PA & lateral
013R1	? Tabulated right hilum - need old film comparison
013R1	Non specific blunting right CPA
013R1	Blunting of costophrenic angles right to left, recommend decubitis films to R/O effusions

*NIOSH Form Item 4C.

013R1 Minimal blunting right costophrenic angle (less than ILO standard)
014R1 P/O (CABS)?, old gun shot wound
014R1 S/P sternotomy, minimal extrapleural fat along lateral walls tiny plate-like atelectasis
014R1 Sternotomy for CABG
014R1 Gun shot wound right arm
014R1 Plate atelectasis left mid-zone - prior sternotomy bullet right shoulder
014R1 S/P CABG
015R1 ??? ____ left diaphragm - probably _____ poor film
016Q1 Calcified granuloma LUZ
016Q1 Calcified granuloma LUZ
016Q1 Cannot evaluate right lateral pleura - under exposure
016R1 ? Bulla left apex
016R1 Could represent wall of a cavity, _____ view should clarify
016R1 Tiny bullae apices
017R1 Vague nodular opacity left 6th anterior interspace - probably nipple shadow, suggest PA & obliques with nipple markers
017R1 Overexposed film, need repeat to evaluate for parenchymal changes
018R2 Calcified left hilar node c/w old Tb
018R2 Old calcified AP window nodes
019Q2 Elevation left hemidiaphragm
019Q2 Elevated left hemidiaphragm
020Q2 Spurs spine right
020Q2 Thoracic vertebral _____
020Q2 PA & RAO
021Q2 Old fracture righ clavicle
021Q2 PA & lateral
022Q2 PA & lateral
024Q2 PA & lateral
024R1 Obesity, parenchymal changes may be due to effects of film technique plus obesity, repeat
025Q1 Could well be extrapleural fat along lateral wall
025Q1 Old surgery right shoulder
025Q1 Post changes _____ shoulder
026Q2 PA & lateral
026R1 ? Tiny granuloma left base, ?? tiny plaques along medial left hemidiaphragm
027Q2 Plate atelectasis right mid zone, bulge lower disc, aorta (? aneurysm, tortuous), compressed lower vert. body on lateral
027Q2 Asymmetric left lateral pleural thickening is probably post traumatic, several vertebral compression fractures are present
027Q2 Disc atelectasis vs fat inflammatory scar RUL
027Q2 Extensive pleural thickening along minor tissue
027Q2 Compression fracture at thoraco junction tort aorta

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027R2 Breast tissue may be a contributing factor in the increase in parenchymal changes
028Q2 PA & lateral
028Q2 Minor areas plate-like atelectasis left base
028Q2 Bulge anterior liver on lateral (? mass or normal)
028Q2 PA & lateral
030Q1 Cardiomegaly
030Q1 Repeat film - effects of obesity and under exposure make it difficult to interpret parenchyma
030R1 ? Hile adenopathy, repeat film needed
031Q1 Boot shaped LV configuration
031R1 Cardiomegaly
032Q2 ??? Calcium in plaque (???) right ____ diaphragm
032Q2 PA & RAO
032Q2 Small eventration right hemidiaphragm
032R1 Bridging left 2nd & 3rd ribs
032R1 Elevated left hemidiaphragm thickened minor tissue prominent pulmonary ___ bilaterally
032R1 Artifactual increased opacity both lung bases due to poor inspiration
032R1 Likely old trauma left 2nd ant. rib interspace
032R1 Patchy opacity bases - likely patchy atelectasis - shallow inspiration; small opacity at left 2nd anterior rib - ? artifact; suggest repeat PA & lateral with
035Q1 Upper mediastinum wide (? right arch or fat) need old films, (T-plate atelectasis left base, bone related left humorus)
035Q1 Small discoid atelectasis left
035Q1 Disc atelectasis left base
035Q1 Minor scar or plate-like atelectasis left base, slight presence upper mediastinum - likely fat
035R2 Old buckshot right chest
035R2 Metalic f.b.'s. due to shot gun
035R2 Previous abdomen surgery
035R2 Scattered gun shot fragments within right chest wall
036Q2 Small nodular lesion left mid-lung field--- ? nipple vs parenchymal lesion
036Q2 PA & lateral
036Q2 Small dense nodular opacity left lower lung likely a granuloma
036Q2 Calcified granuloma left LZ
036Q2 Calcified granuloma left base
036Q2 Probably not occupationally related disease
036R2 Left ventricular hypertrophy, boot shaped heart
037Q2 PA & lateral
038Q2 PA & lateral
038R2 Likely nipple right base/need nipple marker film to be sure
038R2 Nipple shadows
038R2 Get film with nipple marker

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038R2 Nipple shadows
03[illegible]Q2 PA & lateral
[illegible]2 [illegible] lateral
040R1 Repeat
041Q2 Poor contrast of film may have accepted pulmonary markings, repeat film
041Q2 PA & lateral
041R2 Rib post surgical findings right/? 2 nodules left base - need CT
041R2 Right rib P/O deformity, suggests that right CPA blunting is non specific, possible traumatic due surgery
041R2 1 Rib # right 7th posterior with __ between 7th and 8th ribs. 2 prominent pulmonary hilum bitest-due to pulmonary hypertension
041R2 Pleural abnormality attributable to thoracotomy
041R2 Post operative change with partial resection right 7th posterior rib; scar right apex
042R2 Repeat film
043Q2 PA & lateral
044Q2 PA & lateral
045Q2 PA & lateral
047Q2 PA & lateral
047Q2 Muscle slips right
047R1 Apex suggest repeat PA & both obliques
048Q2 PA & lateral
048Q2 Healed fracture left 6th posterior rib
[illegible] Patchy infiltrate (pneumonia or atelectasis) right medial lung base
049Q2 Elevated left hemidiaphragm
049Q2 PA & lateral
049R2 Calcified granuloma RUZ
049R2 Granuloma RUZ
049R2 ? Non calcified nodule right 2nd and interspine
049R2 Calcified granuloma RUL
049R2 Small calcified granuloma RUL
050Q1 Mild extrapleural fat along lateral walls
051Q2 Nodule or nipple left base - need evaluation
051Q2 Suggest follow-up repeat PA and _____ oblique views with nipple markers to rule out lung nodule
051Q2 Small left LZ opacity ? nipple
051Q2 PA & lateral
051R1 Nipple each base likely - need nipple marker film
051R1 Non specific CP angle blunting right to left, nipple shadows
051R1 Get film with nipple markers
051R1 Minor blunting right costophrenic angle (less than ILO standard)
052Q2 ? Nodule right base, need evaluation

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052Q2 Plaque only questionable
052Q2 PA & lateral
052Q2 Hyperaction of lungs, flattened _____c/w C.O.P.D.
052R1 Pleura cannot be properly evaluated
052R1 Repeat film, obese, poor inspiration, under exposed
053Q2 PA & lateral
054R1 Minor chest wall shadows laterally
055Q2 PA & lateral
055R1 [illegible] not definite - maybe subpleural fat
055R1 ? Infiltrate right lower lung zone R/O ___
058Q1 Boot-shaped LV configuration
[illegible] Cardiomegaly
056R2 Massive cardiomegaly
056R2 Cardiomegaly (prominent left ventricle)
057Q2 PA & lateral
057R2 "illegible"
057R2 Dilated descending thoratic aorta
057R2 ? Small calcified plaque right mid-diaphragm on PA
058Q2 Breast soft tissue may be contributing to _____ upper parenchymal infiltrates
059Q2 PA & lateral
059R2 Obese, elevated soft tissue
060Q2 Boot-shaped LV configuration
060Q2 Likely extrapleural fact along lateral walls ____ than plaques
060R2 BU at apices
060R2 Pectus excalation
061Q2 Borderline cardiomegaly, upper in intestinal infiltrated may be ___ to technical ____, repeat film
061R2 BU right apex
061R2 Small linear artifact right apex vs scar vs small bullae
062Q2 Subpleural fat
062Q2 Lateral wall findings could well be that of extrapleural fat
062R1 Likely nipple right base - need nipple marker film
062R1 [illegible] nodular opacity right 6th anterior interspace - almost certainly nipple shadow - suggest confirm with repeat with nipple markers (small eventration
062R1 Slight increase in interstitial infiltrates right lower lung zone - ? soft tissue vs ___ ___
062R1 Right nipple shadow, polyarcuate diaphragms probably not plaque or CA
062R1 Aortic ectasis - get film with nipple markers
063Q2 Boot-shaped LV configuration, upper in parenchymal infiltrates may be due to underexposure, repeat film
063R2 Cardiomegaly
064Q2 Surgical clips g-e junction

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064Q2 P/O clips LUQ abdomen
064Q2 Surgical clips "illegible"
064R1 Non specific left diaphragm indistinctness
065Q1 Right apex
065Q1 R/O _____ predeterminant possible COPD
065R2 Straight back
067R2 Cardiomegaly
068Q2 S/P sternotomy surgical clips upper artheros____
068Q2 Sternotomy for CABG
068Q2 Median sternotomy, S/P CABG
068Q2 Prior surgery, sternal area wires _____ likely nl if no sign of fever
068Q2 P/O sutures & clips
068R2 Mild cardiomegaly
069Q2 Repeat film, due to poor quality of film unable to interpret whether parench. infiltrates ____ to underexposure/obesity or actual parench process
069R1 Cardiomegaly
070Q2 Plate atelectasis left base
070R1 Bilateral hilum adenopathy R/O ____
071R2 Mild eventration right ant hemidiaphragm
072R1 ? Bullet overlying LUQ abdomen
072R1 Bullet injury left __
072R1 Cardiomegaly boot shaped LU configuration
072R1 Mild cardiomegaly
073Q1 Severe dextoid levoscoliosis, colonic interposition liver and diaphragm plate atelectasis left base
073Q1 Scoliosis distorts lungs & compresses lung bases
073Q1 Bowel inter_____ beneath right hemidiaphragm, disc atelectasis
073Q1 Marked thoracic scoliosis; colon under right hemidiaphragm
073Q1 1. Left 5th anterior rib sugessi flu repeat PA and both oblique view with nipple markers to R/O lung nodule. 2. Marked scoliosis. 3. ____ under right
075Q1 3B-b above likely due to old surgery. We see a surgical clip
075Q1 P/O clip right paratradual blunting right CP angle appears _____
075Q1 Clip in superior mediastinum and blunted right CP angle
075Q1 Surgical suture __ _____ area blunting right costophrenic angle may be due to effects of surgery
075Q1 Tenting lateral right hemidiaphragm C/w scarring _____ surgical clip in right "illegible"
075R2 Likely cervical ribs - normal
077Q1 Scar areas linear plate-like atelectasis vs scar bases
077Q1 Enlarged proximal pulmonary _____ probably ____ pulmonary hypertensive changes
077Q1 Plate atelectasis right base
077Q1 Small discoid atelectasis right & left bases
078R1 _____ nodule right mid zone (? granuloma) need old films

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078R1 ? Calcified aortic ectasia
079Q1 Boot-shaped LV configuration due to under exposure upper parenchymal infiltrates may be due to film technique, repeat film
079R2 Emphysema
081R1 Cardiomegaly, mild CHF
081R1 Obese, poor inspiration, under exposed, REPEAT
081R1 Pleura cannot be adequately evaluated because of under exposure
082Q2 Surgical clips epigastic region
082Q2 Surgical clips g-e junction.
082R2 Likely normal muscle shadows left lower lateral wall - obliques may help
082R2 Mild chest wall shadows left lateral
083R2 Old right rib fracture
083R2 Old rib # right 7th
083R2 Old fracture right 7th post. rib
084Q1 Prominent soft tissue (breast) overlying lung ___, upper parenchymal infiltrates may be due to soft tissue artifacts, repeat film
085Q1 Atelectasis, infiltrate left base, need follow up
085Q1 Asymmetric pleural reaction left CP angle & lateral chest probably unrelated to asbestos
085Q1 Film markings running horizontally across right chest wall, need repeat film
085Q1 Scarring L base mild tenting left diaphragm laterally, associated pleural thickening findings ____ likely due to prior on flam. process
085Q1 Parenchymal changes are insufficient to warrant a diagnosis of pneumoconiosis
086R2 Under exposed, overlying soft tissue observing lung parenchyma
087Q2 Bullet upper post abdomen
087Q2 Blunting right costophrenic angle c/w pleural thickening from prior exudative effusion - nonspecific (bullet in right abdomen)
087Q2 Borderline cardiomegaly
087Q2 Pleural reaction right CPA angle probably not asbestos related
087Q2 Old fracture (fx) right clavicle
088Q1 Bulge med left diaphragm (? mass) need CT dextroscoliosis
088Q1 Right perihilar ill defined mass on infiltrate
088Q1 Ill defined mass projecting above left hemidiaphragm
088Q1 ? Soft tissue nodular density along medial half of left hemidiaphragm need CT scan to determine whether parenchymal lesions
088Q1 Obliques would be useful to definitely exclude any underlying lung lesion
088R1 Thoracic scoliosis
089Q2 Chest wall shadow along right lateral wall
089R2 ?? Tiny granuloma right base (vs vascular shadow)
089R2 Mild cardiomegaly
090R1 Prominent proximal pulmonary ____
091Q2 Cardiomegaly
093R2 Cardiomegaly
093R2 1) Bilateral adenopathy R/O sarcoid, 2) boot shaped left ventricular configuration

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093R2 Breast opacity overlies bases
095Q1 Cardiomegaly - enlarged pulmonary outflow tract
096R2 Boot shaped LV configuration
097Q1 Marked obesity/excess soft tissue overlying lung parenchyma, may be a contributing factor in apparent upper intestinal markings
097R2 Upper rib anomalies
097R2 Right cervical rib
097R2 Right cervical rib
098Q1 Very minor area plate-like atelectasis left base (calcified left mediastinal node)
098R1 This exam does not exclude pleural abnormality because of under exposure
099Q1 ?? Plaque with calt right diaphragm - probably costal cartilage overlap, bilateral lower ____ widening, can be fat - need old films
099Q1 Plaque only questionable
099R2 Need obliques to clarify ? of pq as noted in 3c-a above
099R2 Possible right 5th rib fracture, mild compression fracture lower T-spine
099R2 Need better film
099R2 1) Few calcified granuloma, 2) irregular mass overlying anterior aspect of left 4th rib, oblique news needed.
099R2 Probably healed fracture right 5th anterior lateral rib, vague opacities overlying left 4th and probably 5th anterior ribs - suspect in face pleural plaques.
100Q2 Elevated right diaphragm (? etiiology) calt granuloma left upper zone
100Q2 Right diaphragm - elevated with bilateral angle - not asbestos- related
100Q2 Elevated right hemidiaphragm
100Q2 Elevated right hemidiaphragm _____ blunt right costophrenic angle
100Q2 1. Small nodule left "illegible"
100R2 ? Nodule right base - need repeat PA and old film
100R2 1) Localized upper in parenchymal marking RLL ? acute pneumonia vs. chronic ___, 2) mild cardiomegaly
102Q1 Non specific in CP angle blunting
102Q1 Adhesion left
102Q1 Tenting lateral left diaphragm clw scarring left base
102Q1 Slight scar (non pneumocomatic) left diaphragm laterally
102R1 Mild non specific blunting left CP angle
102R1 Repeat film, possible ___in parenchymal abnormalities, but due to effect of obesity/under exposure difficut to interpret
102R1 Under exposure prevents adequate evaluation of pleura
103R2 Minor chest wall shadow over right lateral wall
104Q2 ? Nodule or vessel left 3rd ant. Rib - need old film comparison
104R1 Elevated left hemidiaphragm
105Q1 Prominent soft tissue markings and under exposure positioning artifactual upper in parenchymal marking
105R1 Heart size increased for degree of emphysema
106R2 ? Mass at main pulmonary artery segment - need obliques and old film
106R2 Bilateral fotiness of hilum problem due to adenopathy R/O sarcoid
107R1 Normal bilat - chest wall fat

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107R1 Subpleural fat
107R1 Repeat film
107R1 Probable extrapleural fat along lateral walls
108R1 Calcified granuloma and nodes right - brillet RUQ area of abdomen
108R1 GSW right, old granulourate right lower zone and right hilum
108R1 Previous gunshot wound
108R1 Scattered calcified density RLL..bullet fragment right lower chest wall.
108R1 Bullet overlying right 10th postero-lateral ribs
109Q2 Upper in soft tissue/under exposure contributes to an upper in parenchymal infiltrates
109R1 Old healed fractures left 5-7th posterior ribs
109R1 1) Distortion of left wall, 2) old ribs # 4, 5 and 6, 3) ____ of hilum bilateral-probably upper pulomonary ___
109R1 Old left rib fractures
111Q2 Borderline cardiomegaly, boot-shaped LV configuration
111Q2 Normal chest wall shadow right lateral wall
111R1 Old # left 7th and 8th with possible adjacent pleural thickening along left chest wall, repeat film due to over exposure difficult to interpret ? parenchymal
111R1 Old healed fractures right 7th & 8th posterior ribs
112Q1 Discoid atelectasis left CP angle
112Q1 Repeat film cannot interpret parenchymal probes due to technical ____
112Q1 Minor artifacts present over upper chest left base (scapula overlie, and lower exposure)
112R2 Surgical clips upper abdomen
112R2 Surgical clips LUQ
113Q2 Calcified granulomata bilateral
113Q2 Few small calcified granulomas bilaterally
114Q2 Change of D.I.S.H. thoracic spine
114Q2 Degenerative spondylitis
114R2 Cardiomegaly
114R2 Boot shaped LV enlargement
114R2 Top one heart size
115Q1 Cardiomegaly, mild CHF
115Q1 Marked cardiomegaly "illegible"
115Q1 Cardiomegaly tortuous aorta, lateral wall changes _____ _____ likely due to extrapleural fat
115R1 Si. upper size aortic knob - need old film comparison
116Q1 Repeat film
117Q2 Probable tiny granuloma RLL
117Q2 Calcified granuloma RLZ
117Q2 Calcified granuloma right base
118R2 Plate atelectasis seen only on lateral view retrostanally
119R2 Repeat film

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120R2 Prior sternotomy
120R2 P/O CABS
120R2 S/P CABG blunt left CPL, due to under exposure upper interstitial infiltrates may be due to ___, repeat film
120R2 Sternotomy for CABG
120R2 S/P sternotomy with anterior mediastinal surgical clips - likely S/P CABG
121Q1 Borderline cardiomegaly, calcified aortic arch
121R1 Boot shaped LV configuration
122R2 Cartilage calcification 1st rib left___
123Q2 P/O changes right
123Q2 Tenting right diaphragm & minor scarring right lower lung related to prior thoracotomy (_____ changes right 6th posterior rib)
123Q2 Regenerated rib pleuro diaphragmatic adhesion
123Q2 Post surgical rib and scar on right
123Q2 Abnormal ribs - right 6th posterior _____ ? congenital lesions vs _____; elevated right hemidiaphragm; pleural thickening along right chest wall - ?
123R2 Aberrant right subclavian artery
123R2 Linear Ca lower upper zone (3rd rib?)
124Q2 Abdomen clips on lateral view
124Q2 [illegible] atelectasis left CPA
124Q2 Calcification anterior aspect of ribs 7th and 8th bilateral
124Q2 1) Small linear scar left base; 2) hyperaeration lungs c/w C.O.P.D.; 3) multiple surgical clips anterior upper abdomen
125Q2 Several small granulomas left lung
125R1 Plate atelectasis left base
125R1 Tiny area plate like atelectasis left base
126R2 Plate atelectasis left base
126R2 Small area plate like atelectasis left base
127R2 Scattered calcified granuloma right lung
128R1 Repeat film needed
128R1 Under exposure precludes proper evaluation of the pleura
129Q2 Pacer-cardiac, calcium in liver
129Q2 Pacemaker
129Q2 Pacemaker left chest wall lead in right ventricle apex
129Q2 Cardiac pacemaker
129Q2 Pacemaker in right ventricle from left subclavian
129R1 Borderline cardiomegaly
130Q2 Linear scar RLL
130R2 Borderline cardiomegaly
132Q2 (Buckshot) right chest pleural thickening right costophrenic angle likely related to trauma
132Q2 Lead gunshot pellets in right chest, right costophrenic angle blunting probably due to chest _____ related to gunshot
132Q2 Right hemi thora - with associated old pleural disease

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132Q2 Old gunshot wound and pleural thickening due to it (most likely) at CP angle on right buckshot (on lateral view) appears to line up on pleural space
132Q2 Shotgun pellets right chest due to pleural changed
132R2 Calcified granuloma right apex
133Q1 Poor film technique contributing to upper in intestinal infiltrates, repeat film
133Q1 Nipple shadows
135Q2 Upper _____ pulmonary _____ due to pulmonary hypertensive changes
139Q2 Lower height vertical body mid thoracic
139Q2 Kyphotic deformity thoracic spine - small artifact overlying right mid-lung
141Q2 Nodule right base - nipple vs malignancy, get repeat chest with nipple markers
141Q2 Surgical sutures middle-lower mediastinum and upper abdomen ? gastric/esophageal ____
141Q2 Nodule or nipple right base, mediastinal metal clips
141Q2 Multiple surgical clips lower mediastinum & upper abdomen, old fracture left 5th anterior rib
141Q2 P/O changes _____ & left chest _____
142Q2 Borderline cardiomegaly
143Q2 Small processing artifact right base
144Q2 Plate atelectasis right base
144Q2 Minor plate-like atelectasis right base
145Q2 Upper prox pulmonary vasculative ___ pulmonary hypertensive ____
146Q1 Bilateral hilar adenopathy & right parenchymal node --- sarcoid
146Q1 Right _____ and bilateral hilar adenopathy ? _____ ??? lymphoma
146Q1 Paratracheal & hilar regions, most suggestive of sarcoidosis - other cases of lymph adenopathy not excluded
148Q2 Discoid atelectasis LLZ & RLZ
148Q2 ___ LUL
148Q2 Plate atelectasis left base
148Q2 Linear atelectasis vs ? scar lingula (& RML)
149Q2 Under exposure may be contributing to upper intestinal infiltrate, repeat film, boot-shape LV configuration
151Q1 Obese
151Q1 Subpleural fat
151Q1 _____ left hilum - ? adenopathy vs mass
151Q1 Lateral wall changes could well be due to extrapleural fat
153Q1 Plate atelectasis left base
153Q1 Borderline cardiomegaly possible biket hiler adenopathy; under exposure may be contributing to upper intestitial infiltrates
154Q2 Post-operative changes right hemithorax probably from lobectomy (surgical clips, post-op change right 6th posiror rib)
154Q2 Post surgical changes right ribs and right CP angle, metallic clips
154Q2 P/O changes on R
154Q2 Aortic ectasia, plaques only questionable - may be granuloma disease
154Q2 Blunt right costophrenic angle due to effects of thoractomy thor sutures - right hilum elevated right hemidiaphragm due to "illegible"

11

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Attachment B

Bio Sketch

Joseph N. Gitlin

Education: Doctor of Public Health, 1971, The Johns Hopkins University, Baltimore, MD

Master of Public Health, 1967, The Johns Hopkins University, Baltimore, MD

Statistics Major, 1954, George Washington University, Washington, D.C.

B.A., 1951, University of Pennsylvania, Philadelphia, PA

Recent Experience:

1986-present. Associate Professor of Radiology, The Johns Hopkins University, Baltimore, MD. Designs and directs research and evaluation studies of image management systems, communication networks and image interpretation workstations for all types of diagnostic modalities.

1988-1994. Member, Vice-Chairman and Chairman, MED-PACS Section, NEMA, Washington, D.C. Participated in the development and adoption of implementation policies for the ACR-NEMA Digital Imaging Communications Standard.

1991-1992. Program Chairman, Symposium on Computer Applications in Radiology, Hosted by The Johns Hopkins Medical Institution and the University of Maryland.

1986-1992. Vice President, Medical Affairs, Vortech, Reston, VA. Guided the development and testing of a state-of-the-art storage and retrieval system for medical images which included high-speed transmission of images via satellite and interpretation on electronic workstations.

1980-present. Founder, member, secretary/treasurer, vice-chairman and chairman, Radiology Information Systems Consortium, Harrisburg, PA. Currently known as the Society for Computer Applications in Radiology, Reston, VA. Participated in the design, specification and testing of a comprehensive radiology information system, subsequently marketed by the Digital Equipment Corporation. Among several current projects RISC is coordinating the evaluation of speech recognition systems for reporting interpretations of diagnostic images.

1951-1986. Served in many scientific and executive positions in the Public Health Service, and retired in January 1986. Participated in the conduct and evaluation of the National Tuberculosis Screening Program in which over 3 million chest X-ray examinations were performed. While serving with the Accident Prevention Program,

participated in the evaluation of seat belts for automobiles and developed a reporting program for analyzing accidental injuries. From 1960-1966 designed, tested and directed the National X-ray Exposure Studies in the U.S. while with the Division of Radiological Health. With the Center for Devices and Radiological Health, evaluated early teleradiology system and designed digital imaging network projects for assessment at several university medical centers.

Honors:

Economics – University of Pennsylvania – 1950
Food and Drug Administration Award of Merit – 1979
Public Health Service Special Recognition Award – 1986
Fellow – American College of Radiology – 1987

Professional Society Memberships:

American Public Health Association
Radiological Society of North America
American College of Radiology (Fellow)

Publications:

Principal author on the following publications:

Tuberculosis Expenditures, U.S., 1952. Public Health Reports, September 1954.

Field Trial of a System to Obtain Data on Population Exposure to X-rays, Public Health Reports, Volume 79, No. 3, March 1964.

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